



Telecom Regulatory Authority of India

The Indian Telecom Services Performance Indicators

October–December, 2023

New Delhi, India

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Snapshot

(Data as on Q.E. 31st December, 2023)

Telecom Subscribers (Wireless+Wireline)	
Total Subscribers	1,190.33 Million
% change over the previous quarter	0.78%
Urban Subscribers	662.56 Million
Rural Subscribers	527.77 Million
Market share of Private Operators	91.36%
Market share of PSU Operators	8.64%
Tele-density	85.23%
Urban Tele-density	133.76%
Rural Tele-density	58.56%
Wireless Subscribers	
Total Wireless Subscribers	1,158.49 Million
% change over the previous quarter	0.72%
Urban Subscribers	633.44 Million
Rural Subscribers	525.05 Million
Market share of Private Operators	91.90%
Market share of PSU Operators	8.10%
Tele-density	82.95%
Urban Tele-density	127.88%
Rural Tele-density	58.26%
Total Wireless Data Usage during the quarter	49,543 PB
Number of Public Mobile Radio Trunk Services (PMRTS)	66,149
Number of Very Small Aperture Terminals (VSAT)	2,53,530
Wireline Subscribers	
Total Wireline Subscribers	31.84 Million
% change over the previous quarter	2.79%
Urban Subscribers	29.12 Million
Rural Subscribers	2.72 Million
Market share of PSU Operators	28.27%
Market share of Private Operators	71.73%
Tele-density	2.28%
Rural Tele-density	0.30%
Urban Tele-density	5.88%
No. of Village Public Telephones (VPT)	68,606
No. of Public Call Office (PCO)	26,692

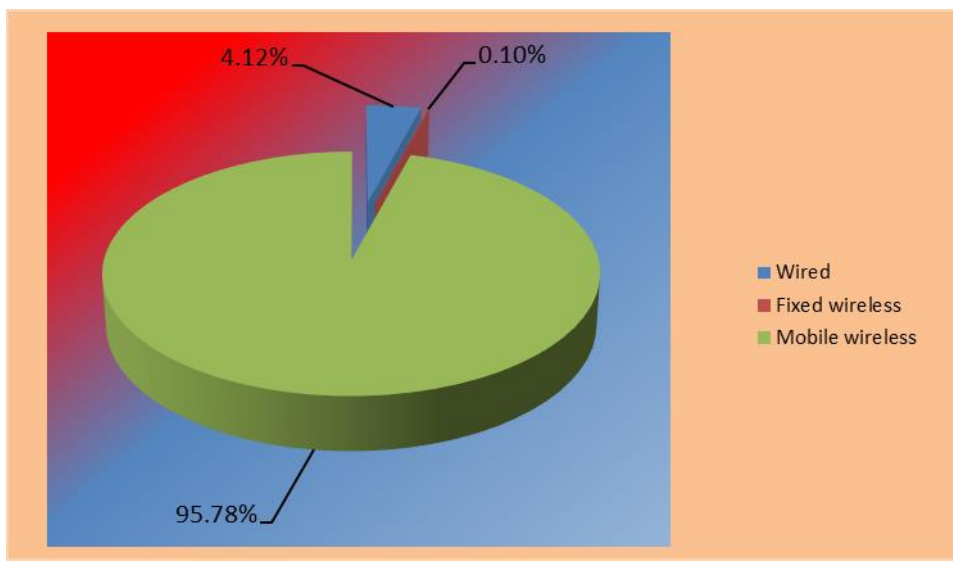
Telecom Financial Data	
Gross Revenue (GR) during the quarter	Rs. 84,500 Crore
% change in GR over the previous quarter	2.13%
Applicable Gross Revenue (ApGR) during quarter	Rs. 81,101 Crore
% change in ApGR over the previous quarter	1.70%
Adjusted Gross Revenue (AGR) during the quarter	Rs. 67,835 Crore
% change in AGR over the previous quarter	1.88%
Share of Public sector undertakings in Access AGR	3.87%
Internet/Broadband Subscribers	
Total Internet Subscribers	936.16 Million
% change over previous quarter	1.96%
Narrowband subscribers	31.62 Million
Broadband subscribers	904.54 Million
Wired Internet Subscribers	38.57 Million
Wireless Internet Subscribers	897.59 Million
Urban Internet Subscribers	548.12 Million
Rural Internet Subscribers	388.05 Million
Total Internet Subscribers per 100 population	67.03
Urban Internet Subscribers per 100 population	110.66
Rural Internet Subscribers per 100 population	43.06
Total Outgoing Minutes of Usage for Internet Telephony	94.73 Million
No. of Public Wi-Fi Hotspots	1,65,163
Aggregate Data Consumed (GB)	50,00,047
Broadcasting & Cable Services	
Number of private satellite TV channels permitted by the Ministry of I&B for uplinking only/downlinking only/both uplinking and downlinking	920
Number of Pay TV Channels as reported by broadcasters	363
Number of private FM Radio Stations (excluding All India Radio)	388
Number of total active subscribers with pay DTH operators	63.52 Million
Number of Operational Community Radio Stations	479
Number of pay DTH Operators	4
Revenue & Usage Parameters	
Monthly ARPU of Wireless Service	Rs.152.55
Minutes of Usage (MOU) per subscriber per month - Wireless Service	955 Minutes
Wireless Data Usage	
Average Wireless Data Usage per wireless data subscriber per month	19.47 GB
Average revenue realization per GB for wireless data usage during the quarter	Rs.9.13

* For ARPU explanation please refer to footnote on Page 52

Executive Summary

1. Total number of Internet¹ subscribers increased from 918.19 million at the end of Sep-23 to 936.16 million at the end of Dec-23, registering a quarterly rate of growth 1.96%. Out of 936.16 million internet subscribers, number of Wired Internet subscribers are 38.57 million and number of Wireless Internet subscribers are 897.59 million.

Composition of internet subscription



2. The Internet subscriber base is comprised of Broadband² Internet subscriber base of 904.54 million and Narrowband³ Internet subscriber base of 31.62 million.
3. The broadband Internet subscriber base increased by 2.21% from 885 million at the end of Sep-23 to 904.54 million at the end of Dec-23. The narrowband Internet subscriber base decreased

¹ Internet: Interconnected global networks that use the internet protocol.

² Broadband: Internet access with a minimum capacity of greater or equal 2Mbps in one or both directions.

³ Narrowband: Internet access with a capacity of less than 2Mbps in one or both directions.

from 33.19 million at the end of Sep-23 to 31.62 million at the end of Dec-23.

4. Wireline subscribers increased from 30.98 million at the end of Sep-23 to 31.84 million at the end of Dec-23 with a quarterly rate of growth 2.79% and, on Y-O-Y basis, wireline subscriptions also increased by 15.98% at the end of QE Dec-23.
5. Wireline Tele-density increased from 2.22% at the end of Sep-23 to 2.28% at the end of Dec-23 with quarterly rate of growth 2.56%.
6. Monthly Average Revenue per User (ARPU)⁴ for wireless service increased by 1.93%, from Rs.149.66 in QE Sep-23 to Rs.152.55 in QE Dec-23. On Y-O-Y basis, monthly ARPU for wireless service increased by 8.09% in this quarter.
7. Prepaid ARPU per month increased from Rs.148 in QE Sep-23 to Rs.149.56 in QE Dec-23 and Postpaid ARPU per month also increased from Rs.167.93 in QE Sep-23 to Rs.189.08 in QE Dec-23.
8. On an all-India average, the overall MOU per subscriber per month increased by 0.71% from 948 in Q.E. Sep-2023 to 955 in Q.E. Dec-2023.
9. Prepaid MOU per subscriber is 989 and Postpaid MOU per subscriber per month is 536 in QE Dec-23.

⁴ ARPU per month is calculated by dividing net subscribers' revenue by average number of subscribers.

10. Gross Revenue⁵ (GR), Applicable Gross Revenue (ApGR) and Adjusted Gross Revenue⁶ (AGR) of Telecom Service Sector for the Q.E. Dec-23 has been Rs.84,500 Crore, Rs.81,101 crore and Rs.67,835 Crore respectively. GR increased by 2.13%, ApGR increased by 1.70% and AGR increased by 1.88% in Q.E. Dec-23, as compared to previous quarter.
11. The Y-O-Y rate of growth in GR, ApGR and AGR in Q.E. Dec-23 over the same quarter in last year has been -4.16%, 5.84% and 7.84% respectively.
12. Pass Through Charges increased from Rs.13,425 Crore in QE Sep-23 to Rs.13,452 Crore in QE Dec-23 with quarterly rate of growth by 0.21%. The Y-O-Y rate of decline 6.46% has been recorded in pass-through charges for QE Dec-23.
13. The License Fee⁷ increased from Rs.5,326 Crore for the QE Sep-23 to Rs.5,433 Crore for the QE Dec-23. The quarterly and the Y-O-Y rates of growth in license fees are 2.01% and 7.98% respectively in this quarter.

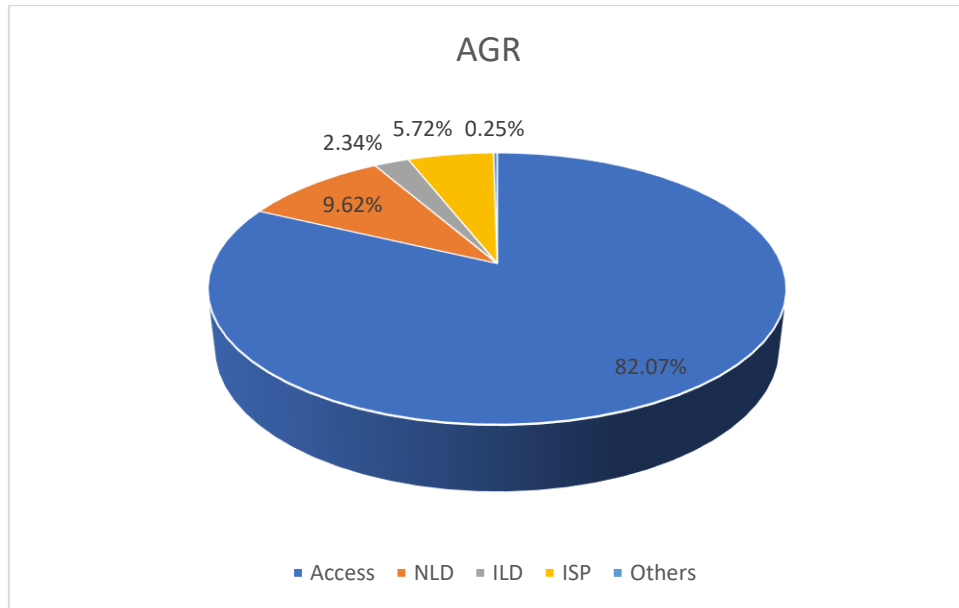
⁵ Gross Revenue is inclusive of installation charges, late fees, sale proceeds of handsets (or any other terminal equipment etc.), revenue on account of interest, dividend, value added services, supplementary services, access or interconnection charges, roaming charges, revenue from permissible sharing of infrastructure and any other miscellaneous revenue, without any set-off for related item of expense etc.

⁶ Adjusted Gross Revenue: The following shall be excluded from the Gross Revenue to arrive at the AGR:

- I. PSTN related call charges (Access Charges) actually paid to other eligible/entitled telecommunication service providers within India;
- II. Roaming revenues actually passed on to other eligible/entitled telecommunication service providers; and
- III. Service Tax on provision of service and Sales Tax actually paid to the Government if gross revenue had included as component of Sales Tax and Service Tax

⁷ License Fee means a fee payable by Licensee at prescribed intervals and rates for the period of the Licence.

Service-wise composition of Adjusted Gross Revenue



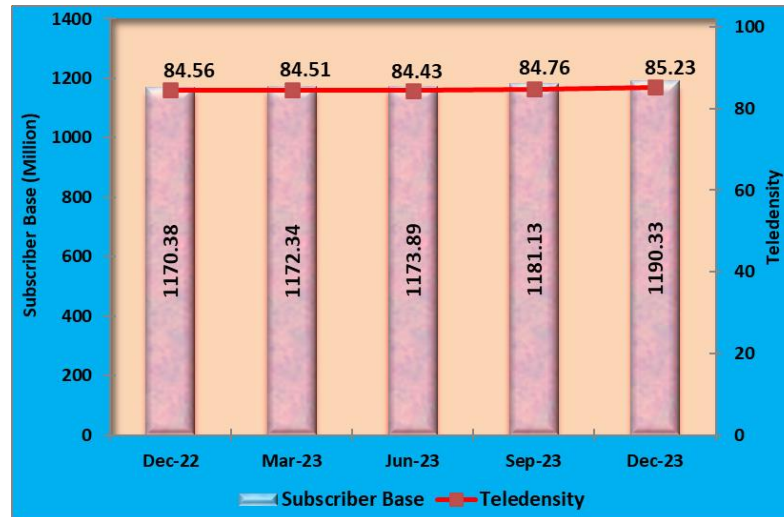
14. Access services contributed 82.07% of the total Adjusted Gross Revenue of telecom services. In Access services, Gross Revenue (GR), Applicable Gross Revenue (ApGR), Adjusted Gross Revenue (AGR), License Fee, Spectrum Usage Charges (SUC)⁸ and Pass Through Charges increased by 2.47%, 2.53%, 2.38%, 2.37%, 1.11% and 1.78% respectively in QE Dec-23.

15. The number of telephone subscribers in India increased from 1,181.13 million at the end of Sep-23 to 1,190.33 million at the end of Dec-23, registering a rate of growth 0.78% over the previous quarter. This reflects Year-On-Year (Y-O-Y) rate of growth 1.70% over the same quarter of the last year. The overall Tele-density in India increased from 84.76% as in QE Sep-23 to 85.23% as in QE Dec-23.

⁸ Spectrum Usage Charge is payable by the licensees providing mobile access services, as a percentage of their Adjusted Gross Revenue (AGR).

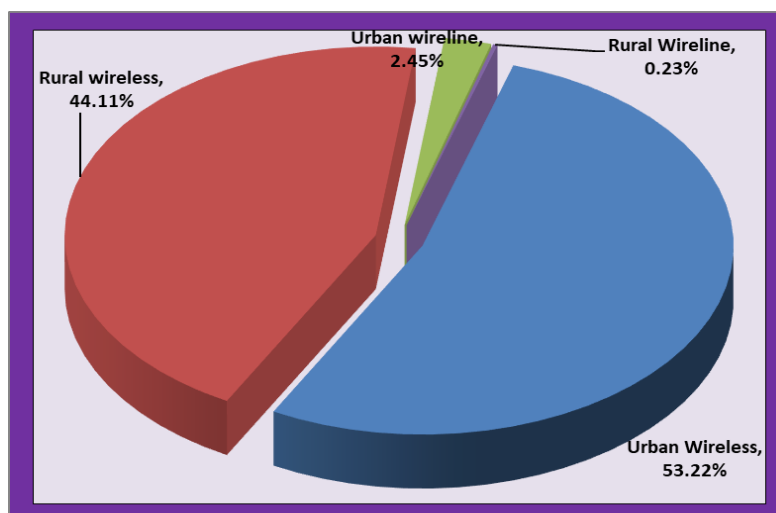
(Source – DoT License Agreement)

Trends in Telephone subscribers and Tele-density in India



16. Telephone subscribers in Urban areas increased from 658.46 million at the end of Sep-23 to 662.56 million at the end of Dec-23 and Urban Tele-density also increased from 133.54% to 133.76% during the same period.
17. Rural telephone subscribers increased from 522.66 million at the end of Sep-23 to 527.77 million at the end of Dec-23 and Rural Tele-density also increased from 58.05% to 58.56% during the same period.
18. Out of the total subscription, the share of Rural subscription increased from 44.25% at the end of Sep-23 to 44.34% at the end of Dec-23.

Composition of Telephone Subscribers



19. With a net increase of 8.34 million subscribers during the quarter, the total wireless subscriber base increased from 1,150.15 million at the end of Sep-23 to 1,158.49 million at the end of Dec-23, registering a rate of growth 0.72% over the previous quarter. On Y-O-Y basis, wireless subscriptions also increased at the rate of 1.36% during the year.
20. Wireless Tele-density increased from 82.54% at the end of Sep-23 to 82.95% at the end of Dec-23 with quarterly rate of growth 0.50%.
21. During this quarter, the following parameters in terms of QoS benchmarks have been fully complied by wireline service providers: -
 - i. Fault incidences No. of faults per 100 subs/month ≤ 7
 - ii. Point of Interconnection'(POI) Congestion (No. of PoIs not meeting benchmark) $\leq 0.5\%$
 - iii. Metering and billing credibility- post-paid $\leq 0.1\%$
 - iv. Metering and billing credibility- pre-paid $\leq 0.1\%$
 - v. Resolution of billing/charging/Credit & validity complaints 98% within 4 weeks
 - vi. Resolution of billing/charging Credit & validity complaints 100% within 6 weeks
 - vii. Period of applying credit/waiver/adjustment to customer's 100% within 1 week of resolution of complaint
22. The following parameters have shown deterioration, as compared to the previous quarter, in QoS by wireline service providers: -
 - i. Accessibility of call centre/customer care $\geq 95\%$
 - ii. % age of calls answered by the operators (voice to voice) within ninety seconds $\geq 95\%$
 - iii. Time taken for refund of deposits after closures 100% within 60 days

23. During this quarter, list of Parameters which are fully complied, as compared to the previous quarter, by all the Cellular Mobile service providers: -

- i. BS Accumulated down-time (not available for service) (%age) $\leq 2\%$
- ii. Worst affected BSs due to down-time (%age) $\leq 2\%$
- iii. Call Set-up Success Rate and Session Establishment Success Rate for Circuit Switched Voice or VoLTE as applicable (within licensee's own network) $\geq 95\%$
- iv. SDCCH/ Paging Channel Congestion/ RRC Congestion (%age) $\leq 1\%$
- v. TCH, RAB and E-RAB congestion (%age) $\leq 2\%$
- vi. Network QoS DCR Spatial Distribution Measure [Network_QSD (90,90)] $\leq 2\%$
- vii. Network QoS DCR Temporal Distribution Measure [Network_QTD (97,90)] $\leq 3\%$
- viii. Connections with good voice quality, Circuit Switched Voice Quality and VoLTE quality $\geq 95\%$
- ix. Down Link (DL) Packet Drop Rate or DL-PDR $\leq 2\%$
- x. Up Link (UL) Packet Drop Rate or UL-PDR $\leq 2\%$
- xi. Point of Interconnection (POI) Congestion (No. of POIs not meeting the benchmark) $\leq 0.5\%$
- xii. Metering and billing credibility - postpaid $\leq 0.1\%$
- xiii. Metering and billing credibility – prepaid $\leq 0.1\%$
- xiv. Resolution of billing/charging/validity complaints - 98% within 4 weeks
- xv. Resolution of billing/charging/validity complaints - 100% within 6 weeks
- xvi. Period of applying credit/waiver/adjustment to customer's account from the date of resolution - within 1 week of resolution of complaint
- xvii. Accessibility of call centre/customer care $\geq 95\%$
- xviii. Termination /Closure of service ≤ 7 days
- xix. Time taken for refund of deposits after closures (100% within 60 days)

24. The following parameters have shown improvement, as compared to the previous quarter, in QoS by Cellular Mobile service providers: -
 - i. Percentage of calls answered by the operators (voice to voice) within ninety seconds \geq 95%
25. A total of approximately 920 private satellite TV channels have been permitted by the Ministry of Information and Broadcasting (MIB) for uplinking only/downlinking only/both uplinking & downlinking.
26. As per the reporting done by broadcasters in pursuance of the Tariff Order dated 3rd March 2017, as amended, out of 910 permitted satellite TV channels which are available for downlinking in India, there are 363 satellite pay TV channels as on 31st December, 2023. Out of 363 pay channels, 259 are SD satellite pay TV channels and 104 are HD satellite pay TV channels.
27. Since the introduction of DTH Sector in the year 2003, Indian DTH (direct-to-home) services have displayed a phenomenal growth. During the QE 31st December 2023, there were 4 pay DTH service providers in the country.
28. Pay DTH has attained total active subscriber base of around 63.52 million. This is in addition to the subscribers of the DD Free Dish (free DTH services of Doordarshan). The total active subscriber base has decreased from 64.18 million in QE September 2023 to 63.52 million in QE December 2023.
29. Apart from the radio channels operated by All India Radio – the public broadcaster, as per the data reported by FM Radio operators to TRAI, as on 31st December 2023, there are 388 operational private FM Radio channels in 113 cities operated by 36 private FM Radio operators. As compared to the previous

quarter, there is no change in the number of operational private FM Radio channels, cities and FM Radio operators.

30. The advertisement revenue reported by FM Radio operators during the quarter ending 31st December 2023 in respect of 388 private FM Radio channels is Rs.485.47 crore as against Rs.408.37 crore in respect of 388 private FM Radio channels for the previous quarter.
31. As on 31st December, 2023, 479 Community Radio stations are operational.

Trends at a Glance

A. Access Service (Wireline + Wireless)									
	QE Dec 2022	QE Mar 2023	QE Jun 2023	QE Sep 2023	QE Dec 2023	%age change over Dec-2022	%age change over Mar-2023	%age change over Jun-2023	%age change over Sep-2023
						(12 months)	(9 months)	(6 months)	(3 months)
1) Subscriber Base (in million)									
Wireline	27.45	28.41	30.31	30.98	31.84	15.98%	12.08%	5.04%	2.79%
Wireless	1142.93	1143.93	1143.58	1150.15	1158.49	1.36%	1.27%	1.30%	0.72%
Total	1170.38	1172.34	1173.89	1181.13	1190.33	1.70%	1.53%	1.40%	0.78%
Rural	517.99	518.63	520.19	522.66	527.77	1.89%	1.76%	1.46%	0.98%
Urban	652.39	653.71	653.70	658.46	662.56	1.56%	1.35%	1.36%	0.62%
2) Tele-density									
Wireline	1.98	2.05	2.18	2.22	2.28	14.95%	11.33%	4.57%	2.56%
Wireless	82.57	82.46	82.25	82.54	82.95	0.46%	0.60%	0.85%	0.50%
Total	84.56	84.51	84.43	84.76	85.23	0.80%	0.86%	0.95%	0.55%
Rural	57.69	57.71	57.83	58.05	58.56	1.51%	1.48%	1.27%	0.88%
Urban	134.16	133.81	133.19	133.54	133.76	-0.29%	-0.03%	0.43%	0.16%
3) Service Provider wise Subscribers Base (in Million) (wireless+wireline)									
Reliance Jio	432.92	439.35	448.53	459.67	470.86	8.76%	7.17%	4.98%	2.44%
Bharti Airtel	374.39	378.06	381.24	385.71	390.04	4.18%	3.17%	2.31%	1.12%
Vodafone Idea	242.04	237.45	230.34	228.19	223.74	-7.56%	-5.78%	-2.86%	-1.95%
BSNL	113.82	110.79	106.10	99.92	98.10	-13.81%	-11.46%	-7.54%	-1.83%
MTNL	5.17	4.66	4.27	4.20	4.15	-19.64%	-10.95%	-2.74%	-1.05%
Tata Tele.	1.57	1.54	2.25	2.27	2.24	42.52%	45.22%	-0.48%	-1.21%
Reliance Com.	0.15	0.15	0.14	0.14	0.13	-11.22%	-9.46%	-6.16%	-2.81%
Quadrant	0.32	0.34	0.36	0.37	0.39	24.07%	16.88%	10.34%	5.35%
VMIPL	0.00	0.00	0.01	0.02	0.02	-	-	62.73%	22.39%
APFSPL	0.00	0.00	0.66	0.65	0.65	-	-	-1.34%	-0.41%
Total	1170.38	1172.34	1173.89	1181.13	1190.33	1.70%	1.53%	1.40%	0.78%

B. Internet Services									
	QE Dec 2022	QE Mar 2023	QE Jun 2023	QE Sep 2023	QE Dec 2023	%age change over Dec-2022	%age change over Mar-2023	%age change over Jun-2023	%age change over Sep-2023
						(12 months)	(9 months)	(6 months)	(3 months)
1) Subscriber's Base (in million)									
A. Wired Internet Subscribers	32.41	33.94	35.54	37.11	38.57	19.03%	13.65%	8.53%	3.95%
B. Wireless Internet Subscribers	833.49	847.31	860.29	881.08	897.59	7.69%	5.93%	4.34%	1.87%
i. Mobile Wireless (Mobile & Dongle)	832.35	846.21	859.33	880.11	896.68	7.73%	5.96%	4.35%	1.88%
ii. Fixed Wireless (Wi-Fi, Wi-Max, Point-to-Point Radio & VSAT)	1.13	1.10	0.96	0.97	0.91	-19.83%	-17.39%	-5.19%	-6.22%
Total Internet Subscribers	865.90	881.25	895.83	918.19	936.16	8.11%	6.23%	4.50%	1.96%
2) No. of Internet Subs per 100 Population	62.56	63.53	64.43	65.89	67.03	7.15%	5.52%	4.04%	1.73%
C. Usage and Revenue for Wireless Services									
Traffic (MOU) (minutes of uses/subscriber/month)	919	946	960	948	955	3.95%	0.95%	-0.50%	0.71%
ARPU (Rs./sub/month)	141.14	142.32	145.64	149.66	152.55	8.08%	7.19%	4.75%	1.93%
D. Telecom Financial Data									
	QE Dec 2022	QE Mar 2023	QE Jun 2023	QE Sep 2023	QE Dec 2023	%age change over Dec-2022	%age change over Mar-2023	%age change over Jun-2023	%age change over Sep-2023
						(12 months)	(9 months)	(6 months)	(3 months)
1. Telecom Sector									
i) Gross Revenue (Rs.in Crores)	88166	85356	80899	82741	84500	-4.16%	-1.00%	4.45%	2.13%
ii) Adjusted Gross Revenue (Rs. in Crores)	62904	64494	65624	66583	67835	7.84%	5.18%	3.37%	1.88%
ii) Applicable Gross Revenue (ApGR)	76627	78631	78349	79747	81101	5.84%	3.14%	3.51%	1.70%
2. Access Services									
Adjusted Gross Revenue (Rs. in Crores)	51023	51631	52838	54376	55670	9.11%	7.82%	5.36%	2.38%

Introduction

This Report presents the Key Parameters and growth trends for the Telecom Services in India for the quarter ending 31st December, 2023. It provides a broad perspective on the Telecom Services to serve as a reference document for various stakeholders, research agencies and analysts. Chapter-1 depicts the growth pattern, in terms of Subscriber base and Tele-density of Wireline, Wireless, Internet and Value Added Services (VAS) as well as Wireless Data Usage. Chapter-2 covers the key revenue and usage parameters. Chapter-3 gives the financial and accounting data. Chapter-4 covers performance of various telecom service providers in terms of QoS. The information relating to Cable TV, DTH & Radio Broadcast services is provided in Chapter-5.

2. The Report has been prepared based on the information furnished by the Service Providers. It is also available on TRAI's website (www.trai.gov.in) and under the link <http://www.trai.gov.in/release-publication/reports/performance-indicators-reports>). Any suggestion or any clarification pertaining to this report, Advisor (F&EA), TRAI may be contacted on Tel. +91-23234367 and e-mail: advfea2@tra.gov.in.

Chapter 1 :

Subscription Data

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- In this report, Tele-density figures are derived from the subscriber data provided by the operators and projection of population from the 'Report of the Technical Group on Population Projections for India and States 2011–2036', which is available under the link https://main.mohfw.gov.in/sites/default/files/Population%20Projection%20Report%202011-2036%20-%20upload_compressed_0.pdf

Section A : Access Service - An Overview

- 1.1 The number of telephone subscribers in India increased from 1,181.13 million at the end of Sep-23 to 1,190.33 million at the end of Dec-23, registering a rate of growth 0.78% over the previous quarter. This reflects year-on-year (Y-O-Y) rate of growth 1.70% over the same quarter of last year. The overall Tele-density in India increased from 84.76% as on 30th September, 2023 to 85.23% as on 31st December, 2023 with quarterly rate of growth 0.55%.

Chart 1.1: Trends in Telephone Subscribers and Tele-density in India

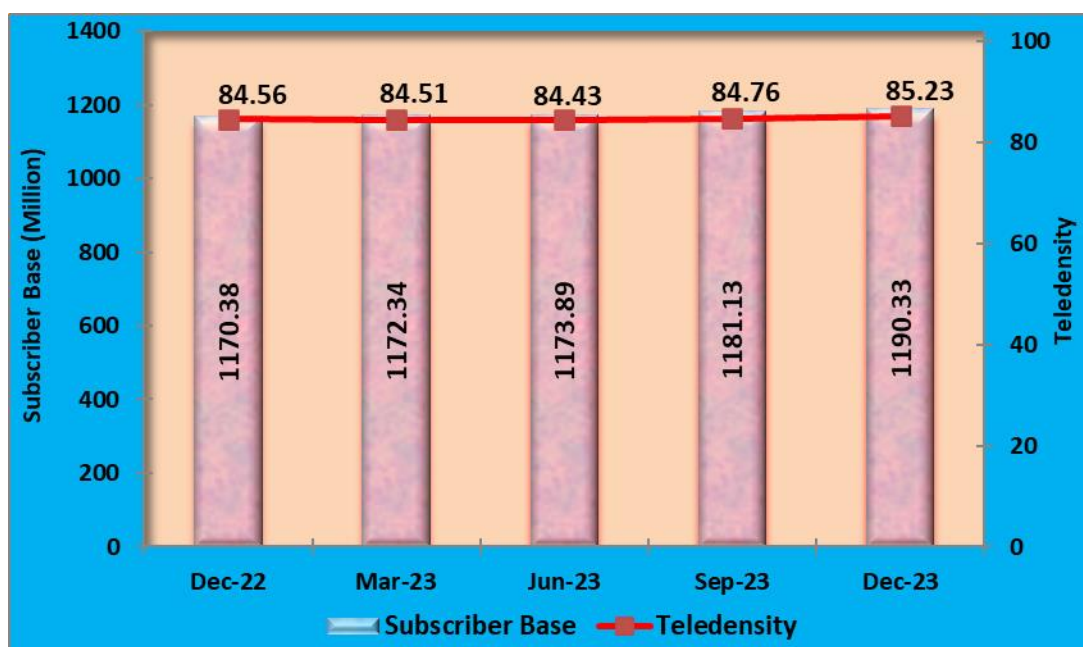
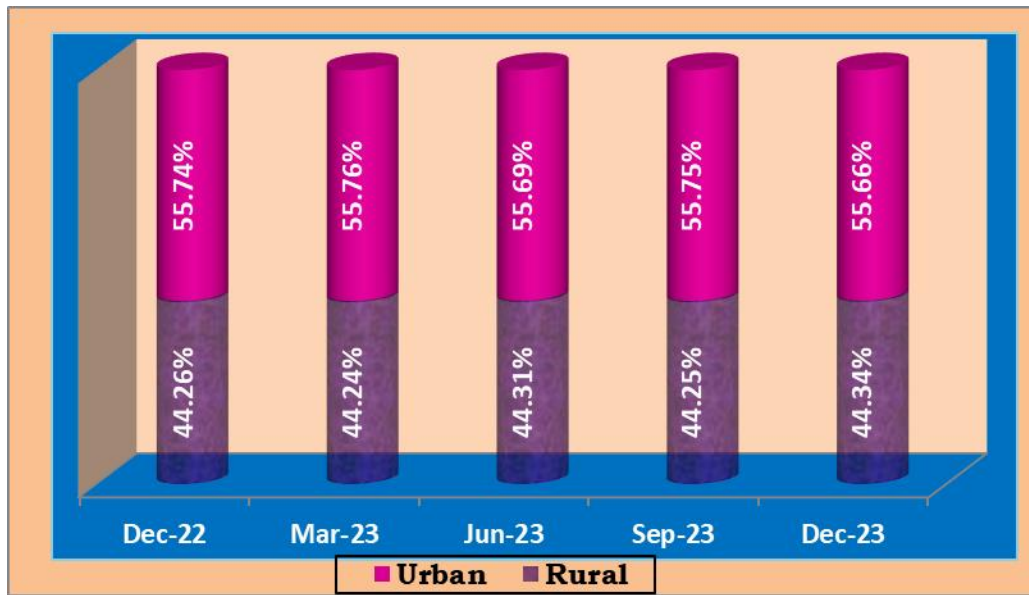


Table 1.1: Subscriber Base & Tele-density - Rural & Urban

Quarter ending	Subscriber Base (million)		Tele-density (%)	
	Rural	Urban	Rural	Urban
Dec-22	517.99	652.39	57.69	134.16
Mar-23	518.63	653.71	57.71	133.81
Jun-23	520.19	653.70	57.83	133.19
Sep-23	522.66	658.46	58.05	133.54
Dec-23	527.77	662.56	58.56	133.76

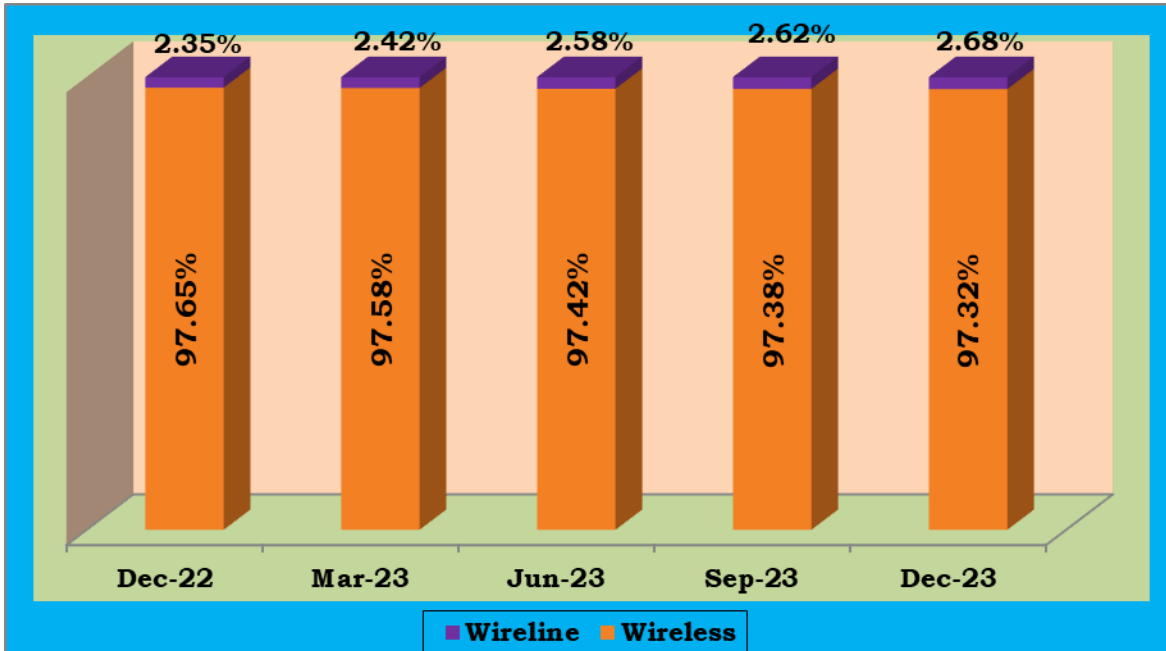
- 1.2 Telephone subscription in Urban areas increased from 658.46 million at the end of Sep-23 to 662.56 million at the end of Dec-23 and Urban Tele-density also increased from 133.54% to 133.76% at the end of the quarter.
- 1.3 Rural telephone subscription increased from 522.66 million at the end of Sep-23 to 527.77 million at the end of Dec-23 and Rural Tele-density also increased from 58.05% to 58.56% at the end of the quarter.
- 1.4 The Y-O-Y rates of growth in Urban and Rural telephone subscriptions from Dec-22 to Dec-23 are 1.56% and 1.89% respectively. The Y-O-Y rates of growth in Urban and Rural Tele-density from Dec-22 to Dec-23 are -0.29% and 1.51% respectively.

Chart 1.2: Market Share - Rural & Urban Subscribers



- 1.5 Share of subscriptions of rural areas in the total telephone subscriptions increased from 44.25% at the end of Sep-23 to 44.34% at the end of Dec-23.

Chart 1.3: Composition of Access subscription - Wireline & Wireless



1.6 Share of wireline subscription in total telephone subscription increased from 2.62% at the end of Sep-23 to 2.68% at the end of Dec-23.

Chart 1.4: Composition of Rural-Urban Telephone Subscription at the end of the quarter

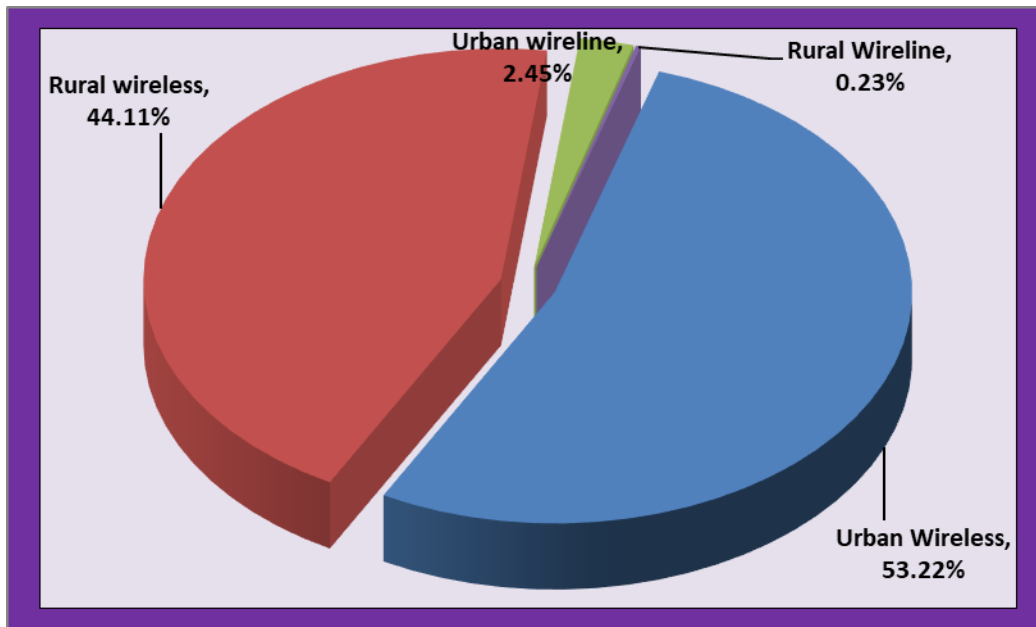


Table 1.2: Service Area wise Access (Wireless+Wireline) Subscriber base

Service Area	Subscribers (million)			
	Sep-23	Dec-23	Net Additions	Rate of Growth
Andhra Pradesh	85.45	86.46	1.00	1.18%
Assam	25.82	26.05	0.23	0.90%
Bihar	93.81	94.90	1.09	1.16%
Delhi	59.70	60.35	0.65	1.09%
Gujarat	67.40	67.86	0.46	0.68%
Haryana	26.85	27.18	0.33	1.23%
Himachal Pradesh	9.07	9.01	-0.061	-0.67%
Jammu & Kashmir	12.64	12.55	-0.09	-0.70%
Karnataka	68.79	69.48	0.69	1.01%
Kerala	43.98	43.79	-0.18	-0.42%
Madhya Pradesh	79.12	79.96	0.84	1.07%
Maharashtra	94.88	94.94	0.06	0.06%
Mumbai	37.35	37.83	0.47	1.26%
North East	12.60	12.72	0.12	0.96%
Odisha	33.66	33.73	0.07	0.22%
Punjab	36.37	36.56	0.19	0.51%
Rajasthan	66.45	66.99	0.54	0.82%
Tamil Nadu	80.45	81.03	0.59	0.73%
Uttar Pradesh(E)	101.18	102.40	1.22	1.20%
Uttar Pradesh(W)	63.18	63.90	0.71	1.13%
Kolkata	24.98	24.84	-0.14	-0.55%
West Bengal	57.39	57.79	0.40	0.70%
All India	1,181.13	1,190.33	9.20	0.78%

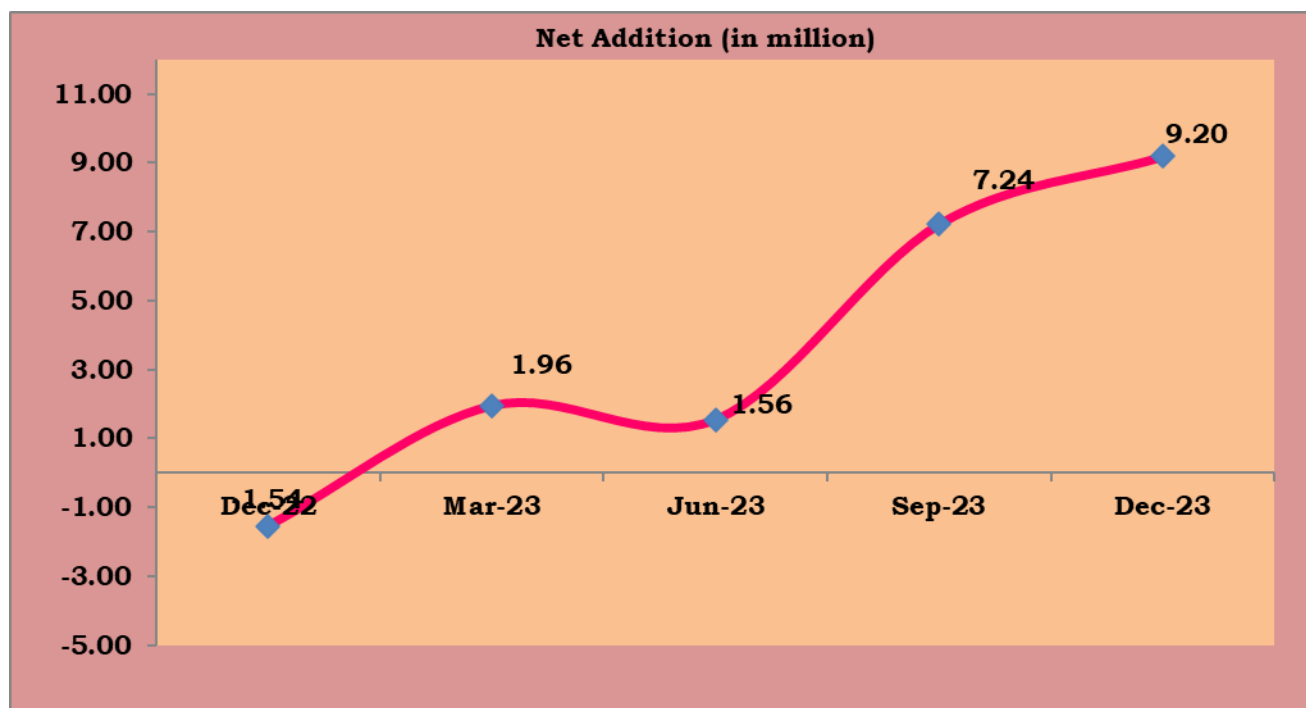
1.7 All service areas, except Himachal Pradesh, Jammu & Kashmir, Kerala and Kolkata, showed growth in their subscriber base during the quarter ending Dec-23. Mumbai service area showed maximum growth of 1.26% during the quarter.

Table 1.3: Service Area wise Rural-Urban Subscribers at QE Dec-23

Service Area	Number of Subscribers (in million)			
	Total	Rural	Urban	% of Rural Subscribers
Andhra Pradesh	86.46	41.57	44.89	48.08%
Assam	26.05	16.49	9.55	63.32%
Bihar	94.90	63.03	31.87	66.42%
Delhi	60.35	1.74	58.61	2.89%
Gujarat	67.86	25.88	41.98	38.14%
Haryana	27.18	12.12	15.06	44.58%
Himachal Pradesh	9.01	5.78	3.23	64.17%
Jammu & Kashmir	12.55	6.01	6.55	47.86%
Karnataka	69.48	25.31	44.18	36.42%
Kerala	43.79	19.40	24.40	44.29%
Madhya Pradesh	79.96	36.40	43.56	45.52%
Maharashtra	94.94	41.87	53.07	44.10%
Mumbai	37.83	1.32	36.50	3.49%
North East	12.72	6.64	6.09	52.16%
Odisha	33.73	22.03	11.71	65.30%
Punjab	36.56	12.13	24.42	33.19%
Rajasthan	66.99	35.54	31.45	53.05%
Tamil Nadu	81.03	24.00	57.03	29.62%
U.P.(E)	102.40	63.17	39.23	61.69%
U.P.(W)	63.90	30.70	33.20	48.04%
Kolkata	24.84	1.66	23.18	6.67%
West Bengal	57.79	34.98	22.81	60.53%
All India	1,190.33	527.77	662.56	44.34%

1.8 Only eight service areas have more than 50% share of rural subscribers in their total number of subscribers. Bihar service area has maximum share of rural subscribers of 66.42% in its total telephone subscribers.

Chart 1.5: Trend of Net Addition/decline in Telephone Subscription



- 1.9 The net increase in telephone subscription is 9.20 million during QE Dec-23 as compared to the net increase of 7.24 million during QE Sep-23.

Table 1.4 : Service Area wise Tele-density

Service Area/ States	As on 30 th September, 2023			As on 31 st December, 2023		
	Rural Tele-density (%)	Urban Tele-density (%)	Total Tele-density (%)	Rural Tele-density (%)	Urban Tele-density (%)	Total Tele-density (%)
Andhra Pradesh	76.95	116.37	93.34	77.87	117.32	94.34
Assam	53.65	170.38	71.90	54.34	169.50	72.38
Bihar	43.85	121.46	55.98	44.44	121.00	56.43
Delhi	-	-	276.54	-	-	278.28
Gujarat	69.77	114.42	91.92	70.00	114.72	92.24
Haryana	68.95	114.46	88.26	69.16	115.94	89.08
Himachal Pradesh	86.56	420.80	121.08	85.96	416.43	120.12

Service Area/ States	As on 30 th September, 2023			As on 31 st December, 2023		
	Rural Tele-density (%)	Urban Tele-density (%)	Total Tele-density (%)	Rural Tele-density (%)	Urban Tele-density (%)	Total Tele-density (%)
J&K	62.88	152.98	90.54	62.05	152.08	89.75
Karnataka	66.64	144.09	101.25	67.39	144.88	102.11
Kerala	-	-	122.40	-	-	121.77
Madhya Pradesh	42.66	128.80	67.30	43.27	128.98	67.82
Maharashtra (incl. Mumbai)*	66.16	141.06	102.88	65.90	141.67	103.10
North East	62.81	110.66	79.58	64.53	108.93	80.16
Orissa	61.05	139.05	75.87	61.28	138.46	75.98
Punjab	67.71	170.81	113.36	67.86	171.32	113.76
Rajasthan	58.78	143.87	81.50	59.34	143.91	81.94
Tamil Nadu	66.35	132.52	102.27	66.85	133.17	102.93
Uttar Pradesh (incl. UPE & UPW)*	49.10	117.86	66.07	49.99	117.48	66.67
West Bengal (incl. Kolkata)*	57.76	122.97	81.99	58.06	122.72	82.15
All India	58.05	133.54	84.76	58.56	133.76	85.23

* Population data/projections are available state-wise only.

Notes:-

1. Tele-density figures are derived from the subscriber data provided by the operators and the population projections, for Urban and Rural areas, of the country are taken from projection of population from the 'Report of the Technical Group on Population Projections for India and States 2011 – 2036', which is available under the link https://main.mohfw.gov.in/sites/default/files/Population%20Projection%20Report%202011-2036%20-%20upload_compressed_0.pdf
2. Delhi Service area, apart from the State of Delhi, includes wireless subscribers of the areas served by the local exchanges of Ghaziabad & Noida (in UP) and Gurgaon & Faridabad (in Haryana).
3. Data/information for Andhra Pradesh includes Telengana, Madhya Pradesh includes Chhatishgarh, Bihar includes Jharkhand, Maharashtra includes Goa, Uttar Pradesh includes Uttarakhand, West Bengal includes Sikkim and North-East includes Arunachal Pradesh, Manipur, Meghalaya, Mizoram, Nagaland & Tripura states.

1.10 Himachal Pradesh service area has the highest Rural Tele-density of 85.96 followed by Andhra Pradesh service area of 77.87. Madhya Pradesh service area has the lowest Rural Tele-density of 43.27 followed by Bihar service area with rural tele-density of 43.44 in QE Dec-23.

Table 1.5 : State/UT wise subscriber base (wireline+wireless)

Sl. No.	States/UT	Total Telephone Subscription (million)		
		Total	Rural	Urban
1	Andhra Pradesh	44.54	24.53	20.01
2	Arunachal Pradesh	1.27	0.85	0.42
3	Assam	26.05	16.49	9.55
4	Bihar	70.30	49.31	20.99
5	Chhattisgarh	20.69	10.05	10.64
6	Goa	2.53	0.86	1.67
7	Gujarat	66.93	25.56	41.37
8	Haryana	36.21	12.52	23.68
9	Himachal Pradesh	9.01	5.78	3.23
10	Jharkhand	24.60	13.73	10.87
11	Karnataka	69.48	25.31	44.18
12	Kerala	43.73	19.38	24.35
13	Madhya Pradesh	59.27	26.35	32.92
14	Maharashtra Incl. Mumbai	130.24	42.33	87.91
15	Manipur	2.44	1.00	1.44
16	Meghalaya	2.63	1.65	0.98
17	Mizoram	1.41	0.54	0.87
18	Nagaland	1.70	0.88	0.82
19	Odisha	33.73	22.03	11.71
20	Punjab	34.41	12.09	22.32
21	Rajasthan	66.99	35.54	31.45
22	Sikkim	0.84	0.52	0.33
23	Tamil Nadu	79.83	23.63	56.20
24	Telangana	41.92	17.03	24.88
25	Tripura	3.28	1.72	1.55
26	Uttar Pradesh (UPE + UPW)	165.07	88.37	76.70
27	Uttarakhand	12.47	6.34	6.13
28	West Bengal Incl. Kolkata	81.24	35.86	45.38
Union Territories				
1	Andaman & Nicobar Islands	0.55	0.26	0.29
2	Chandigarh	2.02	0.04	1.98
3	Dadra and Nagar Haveli and Daman and Diu	0.93	0.32	0.61
4	Delhi	40.21	0.51	39.71
5	Jammu & Kashmir	12.04	5.71	6.32
6	Ladakh	0.52	0.29	0.22
7	Lakshdweep	0.07	0.02	0.05
8	Puduchery	1.21	0.37	0.84
Total		1190.33	527.77	662.56

Table 1.6: State/UT wise total Tele-density

Sl.No.	State/UT	Total Tele-density (%)		
		Total	Rural	Urban
1	Andhra Pradesh	83.55	123.73	227.73
2	Arunachal Pradesh	80.55	72.74	102.98
3	Assam	72.38	54.34	169.50
4	Bihar	54.80	43.85	132.56
5	Chhattisgarh	67.92	45.43	127.58
6	Goa	160.04	233.59	137.63
7	Gujarat	92.67	69.59	116.55
8	Haryana	118.66	71.48	182.29
9	Himachal Pradesh	120.12	85.96	416.43
10	Jharkhand	61.69	46.72	103.58
11	Karnataka	102.11	67.39	144.88
12	Kerala	121.82	235.26	88.04
13	Madhya Pradesh	67.78	42.49	129.44
14	Maharashtra Incl. Mumbai	102.39	64.95	141.74
15	Manipur	75.12	45.68	135.88
16	Meghalaya	77.96	61.55	140.93
17	Mizoram	113.27	96.47	126.93
18	Nagaland	75.39	73.68	77.30
19	Odisha	75.98	61.28	138.46
20	Punjab	111.37	67.62	171.48
21	Rajasthan	81.94	59.34	143.91
22	Sikkim	121.49	151.53	92.35
23	Tamil Nadu (incl. Chennai)	103.60	66.75	134.93
24	Telangana	109.35	86.11	134.14
25	Tripura	78.39	68.88	92.58
26	Uttar Pradesh (UPE +UPW)	69.45	49.01	133.65
27	Uttarakhand	106.24	84.80	143.88
28	West Bengal Incl. Kolkata	81.66	57.34	122.84
Union Territories				
1	Andaman & Nicobar Islands	135.83	117.10	159.20
2	Chandigarh	162.68	-	-
3	Dadra and Nagar Haveli and Daman and Diu	69.23	132.27	55.51
4	Delhi	185.43	-	-
5	Jammu & Kashmir	87.96	60.31	150.20
6	Ladakh	170.92	141.45	234.83
7	Lakshdweep	95.06	-	-
8	Puduchery	72.07	74.38	71.09
Total		85.23	58.56	133.76

Table 1.7 : Service Provider wise Growth in Subscriber base

Service Provider	Subscriber base (millions)			Rate of Growth (%)	Market Share in QE Sep-23 (%)	Market Share in QE Dec-23 (%)
	Sep-23	Dec-23	Net Additions			
Reliance Jio	459.67	470.86	11.19	2.44%	38.92%	39.56%
Bharti Airtel	385.71	390.04	4.34	1.12%	32.66%	32.77%
Vodafone Idea Ltd	228.19	223.74	-4.45	-1.95%	19.32%	18.80%
BSNL	99.92	98.10	-1.82	-1.83%	8.46%	8.24%
MTNL	4.20	4.15	-0.04	-1.05%	0.36%	0.35%
Tata Teleservices	2.27	2.24	-0.03	-1.21%	0.19%	0.19%
Quadrant	0.37	0.39	0.020	5.35%	0.03%	0.03%
Reliance Com.	0.14	0.13	0.00	-2.81%	0.01%	0.01%
APSFL	0.65	0.65	0.00	-0.41%	0.06%	0.05%
VMIPL	0.02	0.02	0.004	22.39%	0.001%	0.002%
Total	1,181.13	1,190.33	9.20	0.78%	100	100

Note: M/s BSNL includes number of subscribers of its Virtual Network Operator (VNO).

1.11 M/s Reliance Jio Infocomm Ltd is the market leader with 39.56% in the access segment in terms of number of subscribers with 470.86 million subscribers at the end of Dec-23 followed by M/s Bharti Airtel Ltd with 390.04 million subscribers.

1.12 In term of net addition, Reliance Jio became the biggest gainer with net addition of 11.19 million telephone subscribers during the QE Dec-23.

Table 1.8: Market Share of the service providers in total rural subscriber base

Service Provider	No. of Total Subscribers (in millions)	No. of Rural Subscribers (in millions)	Percentage of Rural subscribers	Market share of Rural subscribers
Reliance Jio	470.86	202.82	43.07%	38.43%
Bharti Airtel	390.04	185.16	47.47%	35.08%
Vodafone Idea Ltd	223.74	108.54	48.51%	20.57%
BSNL	98.10	30.70	31.30%	5.82%
MTNL	4.15	0.04	0.91%	0.01%
Tata Teleservices	2.24	0.01	0.38%	0.002%
Quadrant	0.39	0.02	4.26%	0.003%
Reliance Com.	0.13	0.0004	0.27%	0.0001%
VMIPL	0.02	-	0.00%	0.00%
APSFL	0.65	0.48	74.00%	0.09%
Total	1,190.33	527.77	44.34%	100

1.13 M/s APSFL is the telecom service provider with highest proportion of rural telephone subscribers of 74% followed by Vodafone Idea Ltd of 48.51% to their total telephone subscribers at the end of Dec-23.

Section B : Wireless Service

Table 1.9: List of Wireless Access Service Providers currently providing service

[As on 31st December, 2023]

Sl.No.	Service Provider	Licensed Service Areas
1	Reliance Jio Infocom Ltd	All India
2	Bharti Airtel Ltd	All India
3	Vodafone Idea Ltd	All India
4	BSNL	All India (except Delhi & Mumbai)
5	MTNL	Delhi & Mumbai
6	Reliance Communications Ltd	All India (except Assam & NE)

Source : DoT website

UL Access Services Licensees Virtual Network Operators (VNOs) who are providing services as on 31st December, 2023

1	AdPay Mobile Payment India Pvt. Ltd	Tamil Nadu
2	Surftelecom Private Limited	Tamil Nadu

Source : As reported by telecom service providers

- 1.14 Number of wireless subscriber base has increased from 1,150.15 million at the end of Sep-23 to 1,158.49 million at the end of Dec-23, thereby showing a quarterly rate of growth 0.72%. During the quarter, net increase of 8.34 million wireless subscribers has been recorded.
- 1.15 The wireless subscriber base recorded a Y-O-Y rate of growth 1.36% in QE Dec-23 over the same quarter in the previous year.
- 1.16 Wireless Teledensity in the country increased from 82.54% at the end of Sep-23 to 82.95% at the end of Dec-23.

Chart 1.6: Wireless Subscriber Base and Teledensity

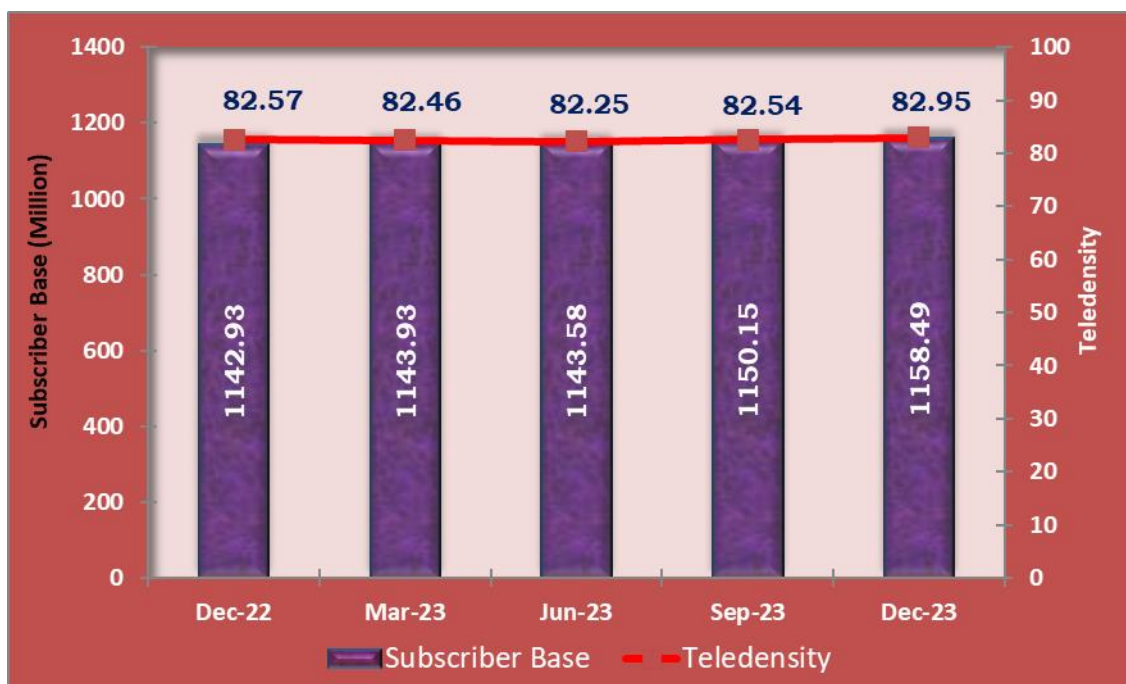


Table 1.10: Wireless Subscriber Base & Tele-density - Rural & Urban

Quarter ending	Subscriber Base (million)		Tele-density (%)	
	Rural	Urban	Rural	Urban
Dec-22	515.89	627.03	57.46	128.94
Mar-23	516.38	627.54	57.46	128.45
Jun-23	517.51	626.07	57.53	127.56
Sep-23	519.99	630.17	57.75	127.81
Dec-23	525.05	633.44	58.26	127.88

1.17 Number of Rural Wireless subscribers increased from 519.99 million at the end of Sep-23 to 525.05 million at the end of Dec-23 and number of urban wireless subscribers also increased from 630.17 million to 633.44 million during the quarter. Quarterly rate of growth of Rural and Urban wireless subscriptions are 0.97% and 0.52% respectively during QE Dec-23.

1.18 The share of rural wireless subscription increased from 45.21% million at the end of Sep-23 to 45.32% million at the end of Dec-23.

Chart 1.7: Wireless Market Share - Rural & Urban

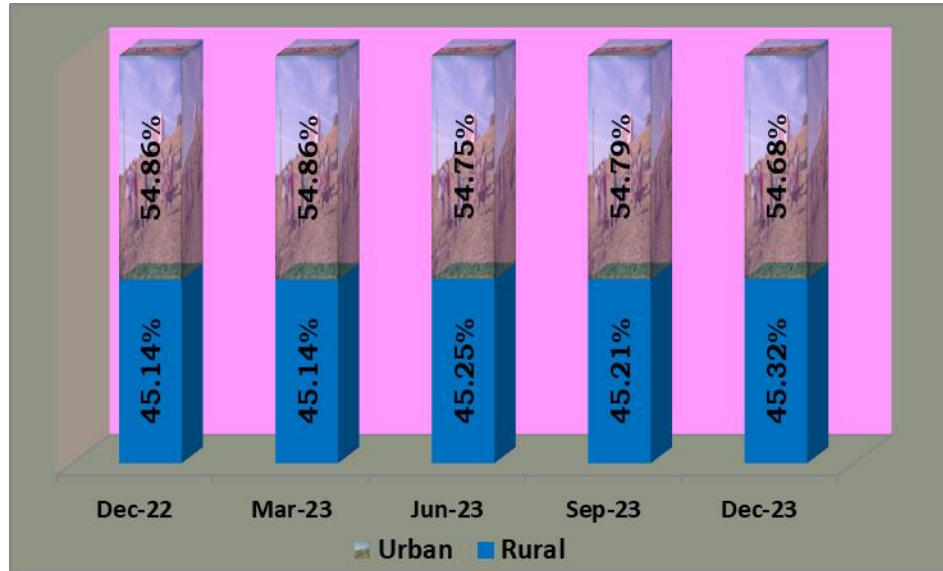


Table 1.11: Growth in Wireless Subscriber base

Service Provider	Subscriber Base (millions)			Rate of Growth	Market Share Sep-23	Market Share Dec-23
	Sep-23	Dec-23	Net Addition			
Reliance Jio	449.21	459.81	10.60	2.36%	39.06%	39.69%
Bharti Airtel	377.78	381.73	3.95	1.05%	32.85%	32.95%
Vodafone Idea Ltd	227.53	223.05	-4.49	-1.97%	19.78%	19.25%
BSNL	93.67	91.96	-1.71	-1.83%	8.14%	7.94%
MTNL	1.95	1.94	-0.01	-0.65%	0.17%	0.17%
Reliance Com.	0.002	0.002	0.00	0.00%	0.0002%	0.0002%
Total	1,150.15	1,158.49	8.34	0.72%	100	100

1.19 M/s Reliance Jio Infocom Ltd. is the market leader with a wireless subscriber base of 459.81 million which translates into market share of 39.69% and M/s Bharti Airtel Ltd. is at 2nd position with a total subscriber base of 381.73 million and market share of 32.95%.

1.20 In terms of net additions during QE Dec-23 except M/s Reliance Jio, M/s Bharti Airtel Limited and Reliance Com, all other service providers showed negative growth in their wireless subscribers.

Table 1.12: Service Area wise Wireless Subscriber base

Service Area	Subscriber base (in million)			
	Sep-23	Dec-23	Net Additions	Rate of change (%)
Andhra Pradesh	82.17	83.05	0.88	1.07%
Assam	25.51	25.73	0.22	0.87%
Bihar	93.04	94.06	1.01	1.09%
Delhi	55.39	56.01	0.61	1.11%
Gujarat	66.03	66.41	0.38	0.57%
Haryana	26.34	26.67	0.33	1.24%
Himachal Pradesh	8.91	8.85	-0.06	-0.71%
Jammu & Kashmir	12.26	12.17	-0.10	-0.79%
Karnataka	65.66	66.25	0.60	0.91%
Kerala	42.58	42.39	-0.19	-0.44%
Madhya Pradesh	77.62	78.36	0.74	0.95%
Maharashtra	93.37	93.39	0.02	0.02%
Mumbai	33.88	34.35	0.47	1.40%
North East	12.37	12.47	0.10	0.85%
Orissa	33.21	33.27	0.06	0.17%
Punjab	35.01	35.13	0.13	0.36%
Rajasthan	65.53	66.03	0.51	0.77%
Tamil Nadu	77.67	78.22	0.55	0.71%
U.P.(E)	100.34	101.52	1.18	1.17%
U.P.(W)	62.31	62.99	0.67	1.08%
Kolkata	24.03	23.87	-0.16	-0.66%
West Bengal	56.92	57.31	0.39	0.69%
All India	1,150.15	1,158.49	8.34	0.72%

Table 1.13: Service Area wise Wireless Rural-Urban Subscriber base

Service Area	Subscriber base (in million)			
	Total	Rural	Urban	% of Rural Subscribers
Andhra Pradesh	83.05	40.88	42.18	49.22%
Assam	25.73	16.47	9.26	64.00%
Bihar	94.06	62.96	31.10	66.94%
Delhi	56.01	1.74	54.27	3.10%
Gujarat	66.41	25.82	40.59	38.88%
Haryana	26.67	12.02	14.65	45.08%
Himachal Pradesh	8.85	5.73	3.12	64.76%
Jammu & Kashmir	12.17	5.99	6.18	49.24%
Karnataka	66.25	25.22	41.04	38.06%
Kerala	42.39	18.74	23.64	44.22%
Madhya Pradesh	78.36	36.34	42.03	46.37%
Maharashtra	93.39	41.75	51.64	44.70%
Mumbai	34.35	1.31	33.04	3.81%
North East	12.47	6.62	5.85	53.08%
Orissa	33.27	21.99	11.28	66.09%
Punjab	35.13	11.93	23.20	33.97%
Rajasthan	66.03	35.48	30.56	53.73%
T.N. (incl. Chennai)	78.22	23.74	54.47	30.36%
U.P.(E)	101.52	63.14	38.38	62.20%
U.P.(W)	62.99	30.64	32.34	48.65%
Kolkata	23.87	1.66	22.21	6.94%
West Bengal	57.31	34.89	22.43	60.87%
All India	1,158.49	525.05	633.44	45.32%

1.21 Detailed table on service provider wise wireless subscriber base in each service area is at **Annexure-1.1**.

Table 1.14: Service Area wise Wireless Tele-density

Service Area	As on 30 th September, 2023			As on 30 th December, 2023		
	Rural Tele-density (%)	Urban Tele-density (%)	Total Tele-density (%)	Rural Tele-density (%)	Urban Tele-density (%)	Total Tele-density (%)
A.P.	75.68	109.53	89.76	76.58	110.23	90.63
Assam	53.57	165.40	71.05	54.26	164.36	71.50
Bihar	43.79	118.80	55.52	44.39	118.09	55.93
Delhi	-	-	256.59	-	-	258.26
Gujarat	69.61	110.81	90.05	69.83	110.92	90.27
Haryana	68.40	111.24	86.58	68.61	112.72	87.40
H.P.	85.86	406.95	119.02	85.25	402.42	118.03
J&K	62.70	144.56	87.84	61.87	143.49	86.99
Karnataka	66.40	134.06	96.64	67.15	134.59	97.37
Kerala	-	-	118.50	227.55	85.27	117.85
M.P.	42.59	124.51	66.03	43.19	124.43	66.46
Maharashtra (incl. Mumbai)*	65.96	133.34	99.00	65.69	133.93	99.19
North East	62.66	106.72	78.10	64.37	104.75	78.59
Orissa	60.93	134.19	74.85	61.17	133.42	74.93
Punjab	66.67	162.54	109.12	66.75	162.73	109.33
Rajasthan	58.68	139.93	80.37	59.23	139.82	80.77
Tamil Nadu	65.61	126.63	98.73	66.14	127.19	99.35
Uttar Pradesh (incl. UPE&UPW)*	49.06	115.20	65.38	49.95	114.71	65.96
West Bengal (incl. Kolkata)*	57.61	119.43	80.58	57.91	119.11	80.71
All India	57.75	127.81	82.54	58.26	127.88	82.95

* Population data/projections are available state-wise only.

Notes:

1. Tele-density figures are derived from the subscriber data provided by the operators and the projection of population from the 'Report of the Technical Group on Population Projections for India and States 2011 – 2036', which is available under the link https://main.mohfw.gov.in/sites/default/files/Population%20Projection%20Report%202011-2036%20-%20upload_compressed_0.pdf
2. Delhi Service area, apart from the State of Delhi, includes wireless subscribers of the areas served by the local exchanges of Ghaziabad & Noida (in UP) and Gurgaon & Faridabad (in Haryana).
3. Data/information for Andhra Pradesh includes Telengana, Madhya Pradesh includes Chhatisgarh, Bihar includes Jharkhand, Maharashtra includes Goa, Uttar Pradesh includes Uttarakhand, West Bengal includes Sikkim and North-East includes Arunachal Pradesh, Manipur, Meghalaya, Mizoram, Nagaland & Tripura states.

Table 1.15 : State/UT wise Wireless Subscriber Base

Sl. No.	States/UT	Wireless Subscribers (in million)		
		Total	Rural	Urban
1	Andhra Pradesh	42.36	23.90	18.46
2	Arunachal Pradesh	1.25	0.85	0.40
3	Assam	25.73	16.47	9.26
4	Bihar	69.78	49.25	20.53
5	Chhattisgarh	20.34	10.04	10.31
6	Goa	2.47	0.85	1.62
7	Gujarat	65.48	25.50	39.98
8	Haryana	35.52	12.42	23.10
9	Himachal Pradesh	8.85	5.73	3.12
10	Jharkhand	24.27	13.71	10.57
11	Karnataka	66.25	25.22	41.04
12	Kerala	42.32	18.72	23.60
13	Madhya Pradesh	58.02	26.30	31.72
14	Maharashtra	125.27	42.21	83.06
15	Manipur	2.38	1.00	1.38
16	Meghalaya	2.57	1.64	0.93
17	Mizoram	1.37	0.54	0.84
18	Nagaland	1.67	0.88	0.79
19	Odisha	33.27	21.99	11.28
20	Punjab	33.23	11.90	21.33
21	Rajasthan	66.03	35.48	30.56
22	Sikkim	0.84	0.52	0.32
23	Tamil Nadu	77.07	23.39	53.68
24	Telangana	40.69	16.98	23.71
25	Tripura	3.23	1.72	1.51
26	Uttar Pradesh	163.35	88.31	75.04
27	Uttarakhand	12.13	6.31	5.82
28	West Bengal	79.84	35.79	44.05
Union Territories				
1	Andaman & Nicobar Islands	0.51	0.24	0.27
2	Chandigarh	1.78	0.03	1.75
3	Dadra and Nagar Haveli and Daman and Diu	0.92	0.32	0.60
4	Delhi	36.31	0.51	35.80
5	Jammu & Kashmir	11.65	5.70	5.95
6	Ladakh	0.51	0.29	0.22
7	Lakshdweep	0.06	0.02	0.05
8	Puduchery	1.15	0.36	0.79
Total		1158.49	525.05	633.44

Table 1.16 : State/UT wise Wireless Tele-density

Sl.No.	State/UT	Wireless Tele-density (%)		
		Total	Rural	Urban
1	Andhra Pradesh	79.47	71.14	93.66
2	Arunachal Pradesh	79.45	72.49	99.42
3	Assam	71.50	54.26	164.36
4	Bihar	54.40	43.80	129.64
5	Chhattisgarh	66.77	45.36	123.52
6	Goa	156.31	229.60	133.99
7	Gujarat	90.67	69.42	112.66
8	Haryana	116.41	70.91	177.76
9	Himachal Pradesh	118.03	85.25	402.42
10	Jharkhand	60.86	46.64	100.66
11	Karnataka	97.37	67.15	134.59
12	Kerala	117.90	227.34	85.31
13	Madhya Pradesh	66.36	42.41	124.73
14	Maharashtra	98.48	64.76	133.93
15	Manipur	73.26	45.50	130.55
16	Meghalaya	76.22	61.45	132.91
17	Mizoram	110.13	96.35	121.32
18	Nagaland	74.04	73.66	74.48
19	Odisha	74.93	61.17	133.42
20	Punjab	107.55	66.54	163.90
21	Rajasthan	80.77	59.23	139.82
22	Sikkim	120.69	151.36	90.92
23	Tamil Nadu	100.02	66.06	128.90
24	Telangana	106.15	85.82	127.83
25	Tripura	77.35	68.65	90.31
26	Uttar Pradesh	68.73	48.98	130.75
27	Uttarakhand	103.38	84.43	136.67
28	West Bengal	80.25	57.22	119.24
Union Territories				
1	Andaman & Nicobar Islands	125.48	107.15	148.35
2	Chandigarh	143.19	-	-
3	Dadra and Nagar Haveli and Daman and Diu	68.70	131.92	54.94
4	Delhi	167.41	-	-
5	Jammu & Kashmir	85.15	60.14	141.47
6	Ladakh	169.96	141.09	232.57
7	Lakshdweep	93.17	-	-
8	Puduchery	68.38	71.95	66.88
All India Tele-density		82.95	58.26	127.88

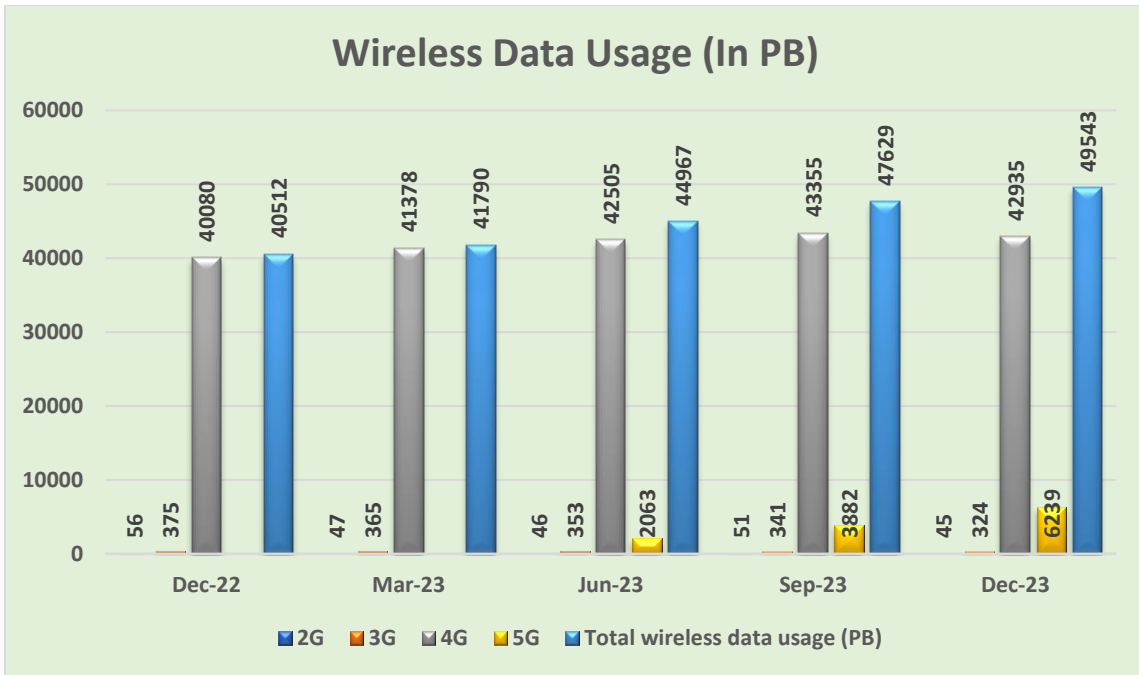
**Table 1.17 : Rural Wireless Subscriber base and Market Share
(as on 31.12.2023)**

Service Provider	Total number of wireless Subscribers (in millions)	Rural Subscribers (in millions)	% of Rural subscribers in total	Market Share of Rural Subscribers
Reliance Jio	459.81	202.59	44.06%	38.59%
Bharti Airtel	381.73	185.16	48.50%	35.26%
Vodafone Idea Ltd	223.05	108.54	48.66%	20.67%
BSNL	91.96	28.72	31.23%	5.47%
MTNL	1.94	0.04	1.82%	0.01%
Reliance Com.	0.002	0.00	0.00%	0.00%
Total	1,158.49	525.05	45.32%	100%

Wireless Data Usage

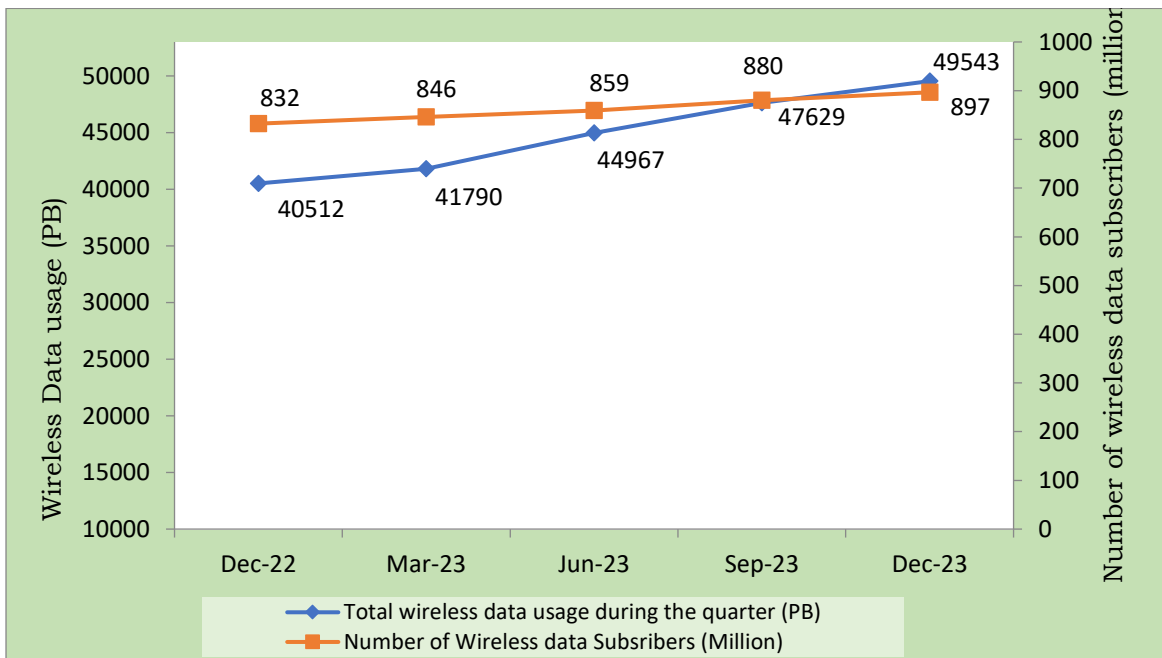
- 1.22 Volume of total wireless data usage increased from 47,629 PB during Q.E. Sep-23 to 49,543 PB during Q.E. Dec-23 with quarterly rate of growth 4.02%. Out of total data wireless usage, 2G data usage was 45 PB, 3G data usage was 324 PB, 4G data usage was 42,935 PB and 5G data usage was 6,239 PB during the quarter.
- 1.23 Total number of wireless data subscribers increased from 880.11 million at the end of Sep-23 to 896.68 million at the end of Dec-23.
- 1.24 The contribution of 2G, 3G, 4G and 5G data usage in total volume of wireless data usage are about 0.09%, 0.65%, 86.66% and 12.59% respectively during the QE Dec-23.
- 1.25 Technology-wise trend of growth in volume of wireless data usage is depicted in the following chart: -

Chart 1.8: Trend of technology wise wireless data usase (in PB)



1.26 The following chart depicts the trend of number of wireless data subscribers and volume of wireless data usage in QE Dec-23.

Chart 1.9: Trend of Wireless data subscribers (million) and volume of wireless data usage (PB)



Section C : Wireline Service

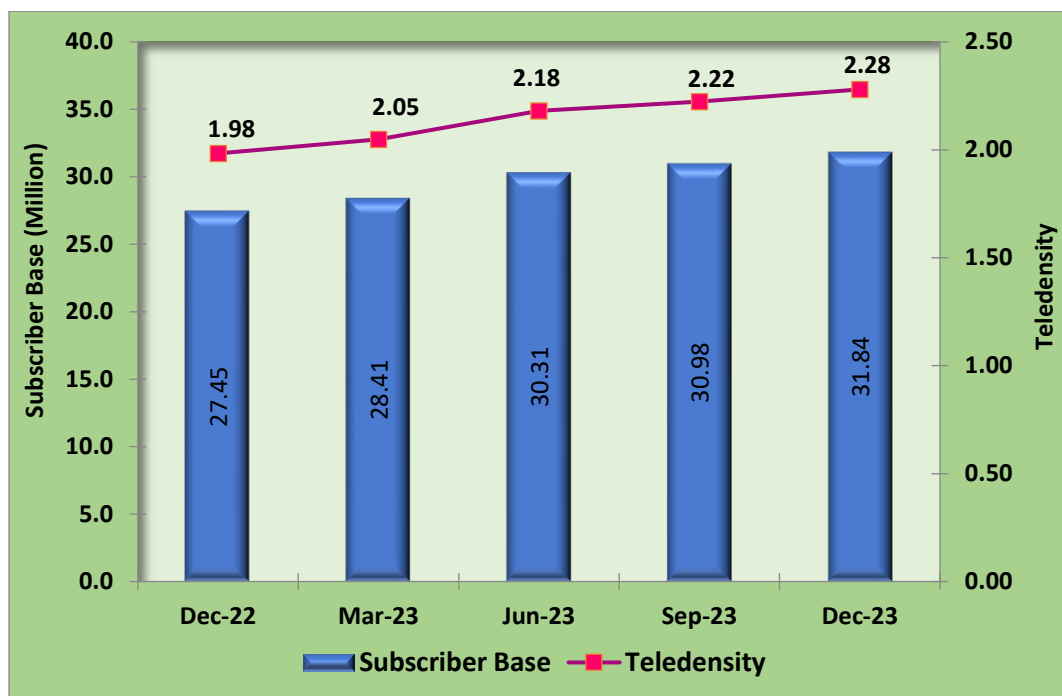
***Table 1.18 : Service Providers providing Wireline Service**

[As on 31st December, 2023]

Sl. No.	Name of the Service Provider	Area of Operation
1	Bharti Airtel Ltd	Andhra Pradesh, Assam, Bihar, Delhi, Gujarat, Haryana, Himachal Pradesh, Jammu & Kashmir, Karnataka, Kerala, Kolkata, Madhya Pradesh, Maharashtra, Mumbai, Odisha, Punjab, Rajasthan, Tamil Nadu (including Chennai), UP-East, UP-West and West Bengal.
2	BSNL	All India except Delhi & Mumbai
3	MTNL	Delhi & Mumbai
4	Quadrant Televentures Ltd.	Punjab
5	Reliance Communications Ltd.	Andhra Pradesh, Bihar, Delhi, Gujarat, Karnataka, Kerala, Kolkata, Madhya Pradesh, Maharashtra, Mumbai, Odisha, Punjab, Rajasthan, Tamil Nadu (including Chennai), UP-East, UP-West and West Bengal
6.	Tata Teleservices Ltd. & Tata Teleservices (Maharashtra) Ltd	Andhra Pradesh, Bihar, Delhi, Gujarat, Haryana, Himachal Pradesh, Karnataka, Kerala, Kolkata, Madhya Pradesh, Maharashtra, Mumbai, Odisha, Punjab, Rajasthan, Tamil Nadu (including Chennai), UP-East, UP-West and West Bengal.
7	Vodafone Idea Ltd	Andhra Pradesh, Assam, Bihar, Delhi, Gujarat, Haryana, Himachal Pradesh, Jammu & Kashmir, Karnataka, Kerala, Kolkata, Madhya Pradesh, Maharashtra, Mumbai, North-East, Odisha, Punjab, Rajasthan, Tamil Nadu (including Chennai), UP-East, UP-West and West Bengal.
8	Reliance Jio Infocomm Ltd.	Andhra Pradesh, Assam, Bihar, Delhi, Gujarat, Haryana, Himachal Pradesh, Jammu & Kashmir, Karnataka, Kerala, Kolkata, Madhya Pradesh, Maharashtra, Mumbai, North-East, Odisha, Punjab, Rajasthan, Tamil Nadu (including Chennai), UP-East, UP-West and West Bengal.
9.	V-CON Mobile & Infra Pvt. Ltd. (VMIPL)	Punjab
10.	Andhra Pradesh State Fibernet Pvt. Ltd. (APFPL)	Andhra Pradesh

1.27 Wireline subscribers base increased from 30.98 million at the end of Sep-23 to 31.84 million at the end of Dec-23 with quarterly rate of growth 2.79%. Overall Wireline Teledensity in the country increased from 2.22% at the end of Sep-23 to 2.28% at the end of Dec-23.

Chart 1.10: Wireline Subscriber Base and Tele-density



1.28 Urban wireline subscriber base increased by 2.91% from 28.30 million at the end of Sep-23 to 29.12 million at the end of Dec-23 and rural wireline subscription also increased by 1.51%, from 2.68 million to 2.72 million during the same period.

Table 1.19: Wireline Subscriber Base & Tele-density - Rural & Urban

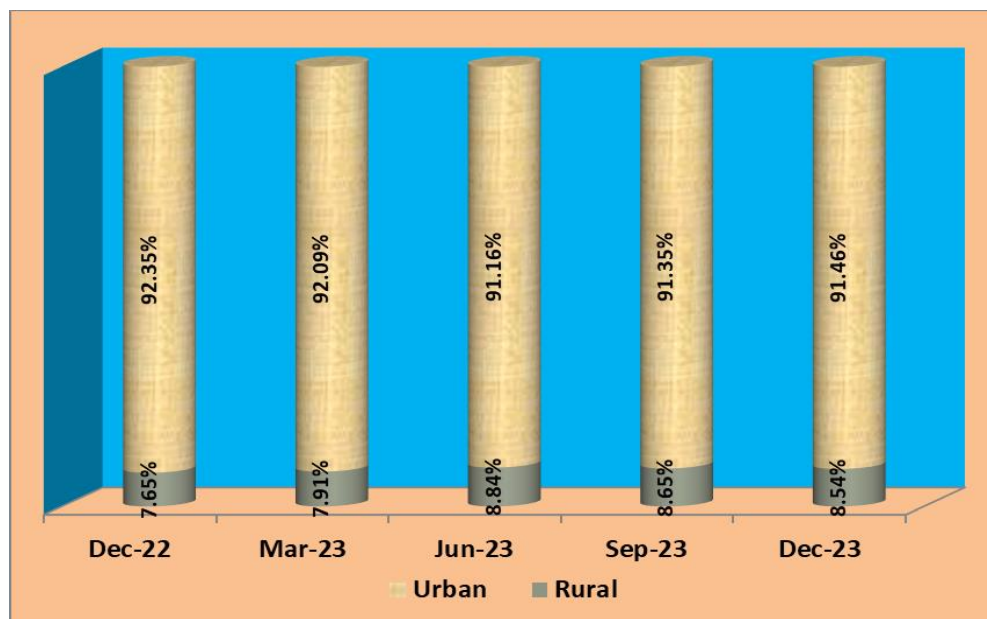
Quarter ending	Subscriber Base (million)		Tele-density (%)	
	Rural	Urban	Rural	Urban
Dec-22	2.10	25.35	0.23	5.21
Mar-23	2.25	26.16	0.25	5.36
Jun-23	2.68	27.63	0.30	5.63
Sep-23	2.68	28.30	0.30	5.74
Dec-23	2.72	29.12	0.30	5.88

**Table 1.20 : Service Provider wise Wireline Subscriber base
(Rural - Urban) – As on 31.12.2023**

Service Provider	Subscriber Base (million)			Percentage of Rural subscribers	Share of Rural subscription
	Rural	Urban	Total		
BSNL	1.98	4.16	6.14	32.30%	72.91%
Bharti	0.002	8.31	8.31	0.03%	0.09%
MTNL	0.00	2.21	2.21	0.002%	0.00%
Tata	0.01	2.23	2.24	0.38%	0.31%
Reliance Com	0.0004	0.13	0.13	0.27%	0.01%
Quadrant	0.02	0.38	0.39	4.26%	0.62%
Vodafone	0.00	0.69	0.69	--	0.00%
Reliance Jio	0.23	10.82	11.05	2.07%	8.43%
VMIPL	0.00	0.02	0.02	0.00%	0.00%
APSFL	0.48	0.17	0.65	74.00%	17.62%
Total	2.72	29.12	31.84	8.54%	100.00%

1.29 Detailed table on service provider wise wireline subscriber base in each service area is at **Annexure-1.2**.

Chart 1.11: Composition of Wireline Subscriber base - Rural & Urban



1.30 Market Share of Rural wireline subscription decreased from 8.65% in QE Sep-23 to 8.54% in QE Dec-23.

Table 1.21 : Service Provider wise growth in Wireline Subscriber base

Service Provider	Subscriber Base (million)			Rate of change (%)	Market share-Sep-23	Market share-Dec-23
	Sep-23	Dec-23	Net Addition			
BSNL	6.25	6.14	-0.11	-1.75%	20.17%	19.28%
Bharti	7.93	8.31	0.39	4.87%	25.59%	26.11%
MTNL	2.24	2.21	-0.03	-1.40%	7.25%	6.95%
Tata	2.27	2.24	-0.03	-1.21%	7.31%	7.03%
Reliance Com	0.14	0.13	0.00	-2.86%	0.44%	0.41%
Quadrant	0.37	0.39	0.02	5.35%	1.21%	1.24%
Vodafone Idea	0.66	0.69	0.03	5.30%	2.12%	2.17%
Reliance Jio	10.46	11.05	0.59	5.67%	33.75%	34.70%
VMIPL	0.02	0.02	0.00	22.39%	0.06%	0.07%
APSFL	0.65	0.65	0.00	-0.41%	2.10%	2.03%
Total	30.98	31.84	0.86	2.79%	100	100

Table 1.22: Service Area wise Wireline Subscriber base & Net Additions (in million)

Service Area	Sep-23	Dec-23	Net Additions	Rate of Change (%)
Andhra Pradesh	3.28	3.40	0.12	3.79%
Assam	0.30	0.32	0.01	3.47%
Bihar	0.77	0.84	0.07	9.68%
Delhi	4.31	4.34	0.03	0.81%
Gujarat	1.37	1.45	0.08	5.95%
Haryana	0.51	0.51	0.00	0.66%
Himachal Pradesh	0.15	0.16	0.00	1.18%
Jammu & Kashmir	0.38	0.39	0.01	2.29%
Karnataka	3.13	3.23	0.10	3.08%
Kerala	1.40	1.41	0.01	0.41%
Madhya Pradesh	1.50	1.60	0.10	6.96%
Maharashtra	1.52	1.56	0.04	2.53%
Mumbai	3.48	3.47	0.00	-0.09%
North East	0.23	0.25	0.02	6.70%
Odisha	0.45	0.47	0.02	3.47%
Punjab	1.36	1.42	0.06	4.55%
Rajasthan	0.92	0.96	0.04	4.11%
Tamil Nadu	2.78	2.82	0.04	1.31%
U.P.(E)	0.84	0.88	0.04	4.66%
U.P.(W)	0.87	0.91	0.04	4.70%
Kolkata	0.95	0.97	0.02	2.29%
West Bengal	0.47	0.48	0.01	2.55%
All India	30.98	31.84	0.86	2.79%

1.31 Bihar service area showed maximum growth of 9.68% in their wireline subscriber base during the quarter ending Dec-23.

**Table 1.23: Service Area wise Wireline Rural-Urban
Subscriber Base (in million)**

Service Area	Total Subscribers	Rural Subscribers	Urban Subscribers	% of Rural Subscribers
Andhra Pradesh	3.40	0.69	2.71	20.26%
Assam	0.32	0.03	0.29	8.03%
Bihar	0.84	0.08	0.77	9.10%
Delhi	4.34	0.004	4.34	0.09%
Gujarat	1.45	0.06	1.39	4.33%
Haryana	0.51	0.10	0.42	18.61%
Himachal Pradesh	0.16	0.05	0.11	30.52%
Jammu & Kashmir	0.39	0.02	0.37	4.40%
Karnataka	3.23	0.09	3.14	2.81%
Kerala	1.41	0.65	0.76	46.37%
Madhya Pradesh	1.60	0.06	1.54	4.03%
Maharashtra	1.56	0.12	1.43	8.02%
Mumbai	3.47	0.01	3.46	0.35%
North East	0.25	0.02	0.23	6.51%
Odisha	0.47	0.04	0.43	8.96%
Punjab	1.42	0.20	1.22	13.93%
Rajasthan	0.96	0.06	0.89	6.56%
Tamil Nadu	2.82	0.26	2.56	9.09%
U.P.(E)	0.88	0.03	0.85	3.45%
U.P.(W)	0.91	0.05	0.86	5.97%
Kolkata	0.97	0.002	0.97	0.16%
West Bengal	0.48	0.09	0.38	19.73%
All India	31.84	2.72	29.12	8.54%

1.32 Kerala service area has the maximum share 46.37% of rural wireline subscriber in its total wireline subscriber base at the end of Dec-23.

Table 1.24: Service Area wise Wireline Tele-density

Service Area	As on 30 th September, 2023			As on 31 st December, 2023		
	Rural Tele-density (%)	Urban Tele-density (%)	Total Tele-density (%)	Rural Tele-density (%)	Urban Tele-density (%)	Total Tele-density (%)
Andhra Pradesh	1.27	6.84	3.58	1.29	7.09	3.71
Assam	0.08	4.98	0.85	0.08	5.14	0.88
Bihar	0.05	2.66	0.46	0.05	2.92	0.50
Delhi	-	-	19.95	-	-	20.02
Gujarat	0.16	3.61	1.87	0.17	3.80	1.97
Haryana	0.55	3.21	1.68	0.55	3.22	1.69
Himachal Pradesh	0.70	13.86	2.06	0.71	14.00	2.08
Jammu & Kashmir	0.18	8.41	2.71	0.18	8.59	2.76
Karnataka	0.23	10.03	4.61	0.24	10.30	4.75
Kerala	7.79	2.71	3.90	7.93	2.72	3.91
Madhya Pradesh	0.07	4.29	1.27	0.08	4.55	1.36
Maharashtra (incl. Mumbai)*	0.20	7.71	3.89	0.21	7.74	3.91
North East	0.15	3.94	1.48	0.16	4.18	1.57
Odisha	0.12	4.86	1.02	0.12	5.05	1.06
Punjab	1.04	8.27	4.24	1.11	8.59	4.43
Rajasthan	0.10	3.94	1.13	0.10	4.09	1.17
Tamil Nadu (incl. Chennai)	0.75	5.89	3.54	0.71	5.98	3.58
Uttar Pradesh (incl. UPE & UPW)*	0.04	2.66	0.69	0.05	2.77	0.72
West Bengal (incl. Kolkata)*	0.15	3.53	1.41	0.15	3.61	1.44
All India	0.30	5.74	2.22	0.30	5.88	2.28

* Population data/projections are available state-wise only

- Note: -
1. Tele-density figures are derived from the subscriber data provided by the operators and projection of population from the 'Report of the Technical Group on Population Projections for India and States 2011 – 2036', which is available under the link https://main.mohfw.gov.in/sites/default/files/Population%20Projection%20Report%202011-2036%20-%20upload_compressed_0.pdf
 2. Data/information for Andhra Pradesh includes Telengana, Madhya Pradesh includes Chhatishgarh, Bihar includes Jharkhand, Maharashtra includes Goa, Uttar Pradesh includes Uttarakhand, West Bengal includes Sikkim and North-East includes Arunachal Pradesh, Manipur, Meghalaya, Mizoram, Nagaland & Tripura states.

Table 1.25: State/UT wise Wireline Subscriber base

Sl. No.	States/UT	Wireline Subscribers (in million)		
		Total	Rural	Urban
1	Andhra Pradesh	2.18	0.63	1.54
2	Arunachal Pradesh	0.02	0.003	0.01
3	Assam	0.32	0.03	0.29
4	Bihar	0.52	0.05	0.46
5	Chhattisgarh	0.35	0.01	0.34
6	Goa	0.06	0.01	0.04
7	Gujarat	1.45	0.06	1.38
8	Haryana	0.69	0.10	0.59
9	Himachal Pradesh	0.16	0.05	0.11
10	Jharkhand	0.33	0.02	0.31
11	Karnataka	3.23	0.09	3.14
12	Kerala	1.41	0.65	0.75
13	Madhya Pradesh	1.25	0.05	1.20
14	Maharashtra Incl. Mumbai	4.97	0.12	4.85
15	Manipur	0.06	0.004	0.06
16	Meghalaya	0.06	0.003	0.06
17	Mizoram	0.04	0.001	0.04
18	Nagaland	0.03	0.0003	0.03
19	Odisha	0.47	0.04	0.43
20	Punjab	1.18	0.19	0.99
21	Rajasthan	0.96	0.06	0.89
22	Sikkim	0.01	0.001	0.01
23	Tamil Nadu	2.76	0.24	2.51
24	Telangana	1.23	0.06	1.17
25	Tripura	0.04	0.01	0.04
26	Uttar Pradesh (UPE+UPW)	1.72	0.06	1.66
27	Uttarakhand	0.33	0.03	0.31
28	West Bengal Incl. Kolkata	1.40	0.07	1.33
Union Territories				
1	Andaman & Nicobar Islands	0.04	0.02	0.02
2	Chandigarh	0.24	0.004	0.24
3	Dadra and Nagar Haveli and Daman and Diu	0.01	0.001	0.01
4	Delhi	3.91	0.0003	3.91
5	Jammu & Kashmir	0.38	0.02	0.37
6	Ladakh	0.003	0.001	0.002
7	Lakshdweep	0.001	0.001	0.001
8	Puduchery	0.06	0.01	0.05
Total		31.84	2.72	29.12

Table 1.26: State/UT wise Wireline Tele-density

Sl.No.	State/UT	Wireline Tele-density		
		Total (%)	Rural (%)	Urban (%)
1	Andhra Pradesh	6.39	2.05	13.77
2	Arunachal Pradesh	1.11	0.25	3.56
3	Assam	0.88	0.08	5.14
4	Bihar	0.40	0.05	2.92
5	Chhattisgarh	1.16	0.07	4.06
6	Goa	3.73	3.99	3.65
7	Gujarat	2.00	0.17	3.90
8	Haryana	2.25	0.57	4.52
9	Himachal Pradesh	2.08	0.71	14.00
10	Jharkhand	0.83	0.08	2.92
11	Karnataka	4.75	0.24	10.30
12	Kerala	3.92	7.92	2.73
13	Madhya Pradesh	1.43	0.08	4.71
14	Maharashtra Incl. Mumbai	3.91	0.19	7.82
15	Manipur	1.86	0.18	5.33
16	Meghalaya	1.74	0.10	8.03
17	Mizoram	3.15	0.12	5.61
18	Nagaland	1.34	0.03	2.83
19	Odisha	1.06	0.12	5.05
20	Punjab	3.82	1.08	7.58
21	Rajasthan	1.17	0.10	4.09
22	Sikkim	0.81	0.17	1.43
23	Tamil Nadu	3.58	0.69	6.03
24	Telangana	3.20	0.29	6.31
25	Tripura	1.05	0.23	2.26
26	Uttar Pradesh (UPE + UPW)	0.72	0.03	2.90
27	Uttarakhand	2.85	0.37	7.21
28	West Bengal incl. Kolkata	1.41	0.12	3.60
Union Territories				
1	Andaman & Nicobar Islands	10.35	9.96	10.85
2	Chandigarh	19.50	-	-
3	Dadra and Nagar Haveli and Daman and Diu	0.53	0.35	0.57
4	Delhi	18.02	0.36	18.08
5	Jammu & Kashmir	2.80	0.17	8.73
6	Ladakh	0.96	0.36	2.27
7	Lakshdweep	1.88	318.00	1.12
8	Puduchery	3.69	2.43	4.22
Total		2.28	0.30	5.88

Public Call Offices (PCO)

1.33 Total number of PCOs in the country decreased from 30,643 at the end of Sep-23 to 26,692 at the end of Dec-23. Detailed table of service provider wise PCOs is available at **Annexure-1.3**.

Chart 1.12: Trend of Number of PCOs



1.34 Number of PCOs continued show declining trend over the year. It has recorded an overall quarterly rate of decline 12.89% and on Y-O-Y basis rate of decline of 46.82% at the QE Dec-23.

Table 1.27: Rate of change & Market share of PCOs

Service Provider	Sep-23	Dec-23	Rate of change (%)	Market share (%) (Dec-23)
BSNL	22,945	20,172	-12.09%	75.57%
MTNL	7,391	6,220	-15.84%	23.30%
Quadrant	307	300	-2.28%	1.12%
Total	30,643	26,692	-12.89%	100%

Village Public Telephones (VPTs)

- 1.35 There are 6,40,930 inhabited villages in India as per census 2011. During the Q.E. Dec-23, there are 68,606 villages having Village Public Telephones (VPTs).
- 1.36 Number of VPTs remained same i.e. 68,606 at the end of Dec-23, as were at the end of Sep-23.
- 1.37 As per the information received in TRAI, at the end of Dec-23, only M/s BSNL was providing VPT in the country. Service area wise detailed table of VPT is available at **Annexure-1.4**.

Chart 1.13: Trend of number of VPTs



Section D: Internet Service

1.38 This section summarizes information submitted by internet service providers for the quarter ending Dec-23. **Part-I** consists of information of Internet service (narrowband+broadband), **Part-II** consists of broadband service and **Part-III** covers narrowband service.

Part-I: Internet Service (broadband + narrowband)

1.39 This report is compiled on the revised definition of Broadband Speed i.e. minimum download speed is 2Mbps. As per reports received from 1167 operators as compared to 1151 operators in last quarter, total number of internet subscribers increased from 918.19 million at the end of Sep-23 to 936.16 million at the end of Dec-23 with quarterly rate of growth 1.96%. Out of total 936.16 million internet subscribers, 904.54 million were broadband subscribers and 31.62 million were narrowband subscribers.

1.40 Wired Internet subscribers increased from 37.11 million at the end of Sep-23 to 38.57 million at the end of Dec-23 with quarterly growth rate of 3.95%. Wireless Internet subscribers increased from 881.08 million at the end of Sep-23 to 897.59 million at the end of Dec-23 with quarterly rate of growth 1.87%.

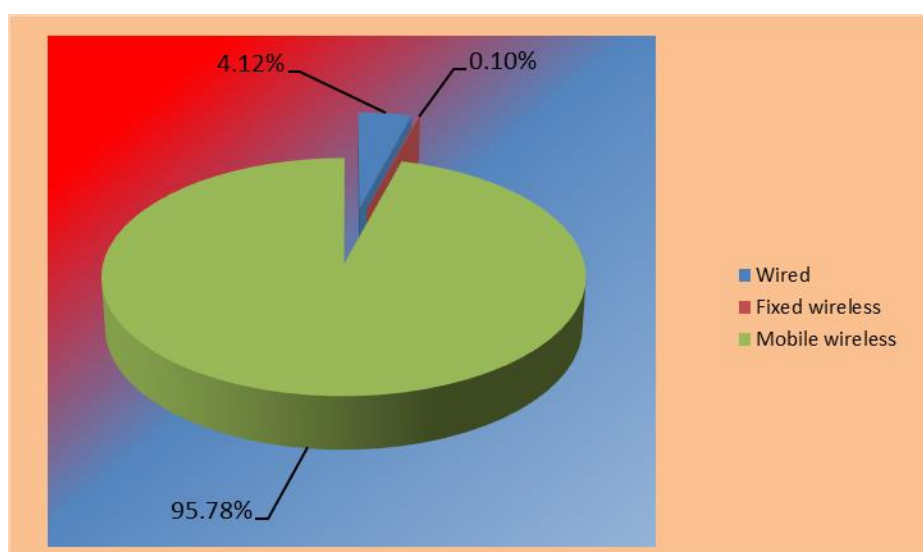
1.41 The number of Broadband subscribers increased from 885 million at the end of Sep-23 to 904.54 million at the end of Dec-23 with quarterly rate of growth 2.21%. Number of Narrowband subscribers decreased from 33.19 million at the end of Sep-23 to 31.62 million at the end of Dec-23 with quarterly rate of decline by 4.71%.

Table 1.28: Trend of Internet subscriber base

Segment	Mode of Access								Total Subscribers (in million)	
	Wired Subscribers (in million)		Wireless Subscribers (in million)							
			Fixed Wireless (Wi-Fi, Wi-Max, Radio & VSAT)		Mobile Wireless (Phone + Dongle)		Total Wireless			
	Sep-23	Dec-23	Sep-23	Dec-23	Sep-23	Dec-23	Sep-23	Dec-23	Sep-23	Dec-23
Broadband	36.87	38.35	0.97	0.91	847.17	865.28	848.13	866.19	885.00	904.54
Narrowband	0.24	0.23	0.004	0.004	32.94	31.39	32.95	31.40	33.19	31.62
Total	37.11	38.57	0.97	0.91	880.11	896.68	881.08	897.59	918.19	936.16

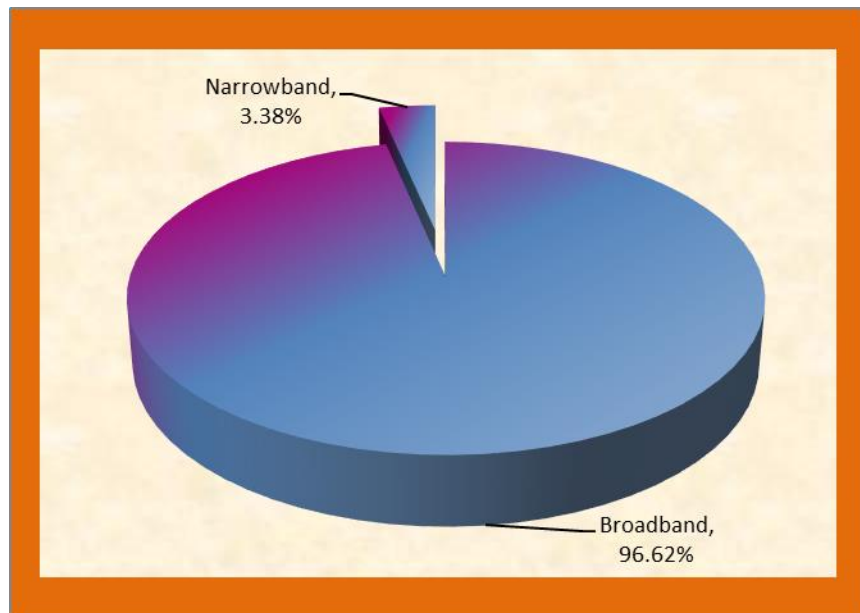
1.42 The following charts present the composition of Internet Subscribers by mode of access and composition of Broadband & Narrowband subscription as on 31st December, 2023.

Chart 1.14: Composition of Internet subscription



1.43 Out of total internet subscribers, 95.78% subscribers are using Mobile devices for access of internet service. Wired internet subscribers are only 4.12% in total internet subscribers at the end of Dec-23.

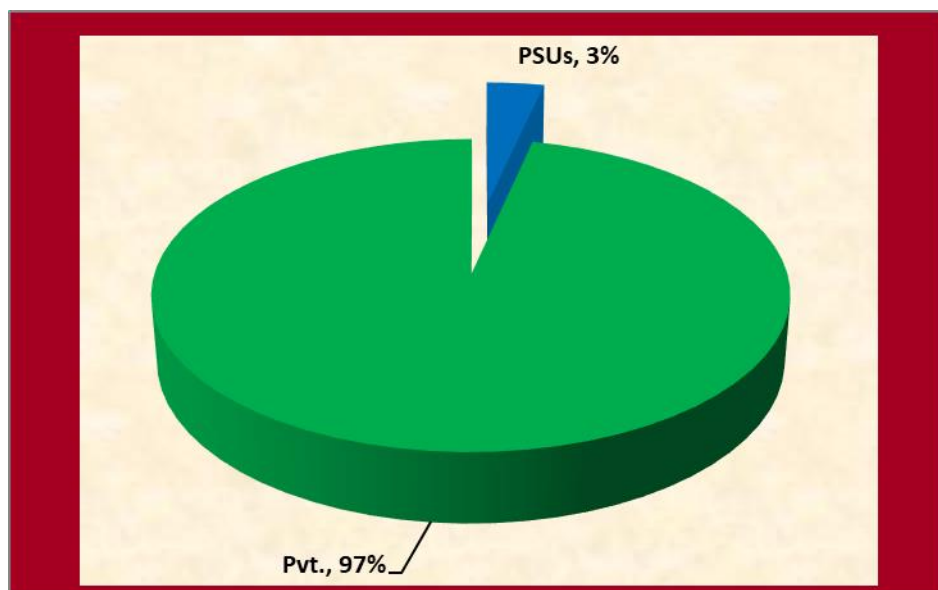
Chart 1.15 : Composition of Broadband & Narrowband subscription



1.44 Out of total internet subscribers, 96.62% subscribers are using broadband for access of internet.

1.45 Share of private internet service providers in total internet subscriber base is 97%, at QE Dec-23. The following charts present the composition of market share of PSUs and Private Internet service providers.

Chart 1.16 : Market share of PSUs and Private Internet Service Providers



1.46 The urban/rural break up of internet subscribers are as per the following table:

Table 1.29: Service Area wise Break up of Rural-Urban internet subscriber base (in millions)

Telecom Service Area	Narrowband		Broadband		Total (Dec-2023)		Total (Sep-2023)	
	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban
Andhra Pradesh	1.10	1.05	29.37	38.45	30.48	39.51	29.86	38.51
Assam	0.22	0.10	11.75	6.74	11.97	6.84	11.59	6.81
Bihar	1.60	0.59	44.67	24.73	46.27	25.32	44.84	25.00
Delhi	0.10	5.92	1.16	48.59	1.26	54.51	0.88	53.88
Gujarat	0.38	0.59	18.07	36.42	18.45	37.01	17.96	36.56
Haryana	0.24	0.70	9.24	9.76	9.48	10.46	8.76	10.75
Himachal Pradesh	0.06	0.06	3.91	2.46	3.97	2.52	3.95	2.52
Jammu & Kashmir	0.13	0.07	4.42	5.26	4.55	5.34	4.58	5.32
Karnataka	1.31	2.63	19.21	33.81	20.52	36.44	20.04	35.43
Kerala	0.48	0.58	15.61	17.13	16.10	17.71	15.68	17.45
Kolkata	0.03	0.40	1.39	17.50	1.42	17.90	1.42	17.73
Madhya Pradesh	0.73	0.57	26.78	36.10	27.51	36.67	26.74	36.11
Maharashtra	0.88	0.93	32.08	45.25	32.96	46.18	32.74	45.62
Mumbai	0.01	0.92	1.22	29.61	1.23	30.53	1.14	30.33
North East	0.08	0.07	5.19	4.80	5.27	4.87	5.05	4.71
Orissa	0.35	0.12	15.33	7.99	15.68	8.11	15.35	8.01
Punjab	0.20	0.44	9.42	18.24	9.62	18.68	9.25	18.64
Rajasthan	0.62	0.67	24.32	25.96	24.93	26.63	24.16	26.43
Tamil Nadu	0.72	1.18	16.51	43.37	17.23	44.55	17.00	43.65
UP (East)	1.92	0.66	41.72	31.05	43.64	31.72	42.18	31.40
UP (West)	0.50	0.69	21.51	25.67	22.01	26.36	19.46	27.63
West Bengal	0.78	0.24	22.72	20.03	23.51	20.26	23.05	20.03
Grand Total	12.45	19.18	375.60	528.94	388.05	548.12	375.66	542.53
	31.62		904.54		936.16		918.19	

*The information is compiled based on the reports being received from the Internet Service Providers.

Table 1.30: State/UT wise Break up of Rural-Urban internet subscriber base (in millions)

S.No.	State(s)	Narrowband		Broadband		Total (Dec-2023)	
		Rural	Urban	Rural	Urban	Rural	Urban
1	Andhra Pradesh	0.64	0.57	16.92	16.77	17.55	17.34
2	Arunachal Pradesh	0.01	0.01	0.50	0.34	0.51	0.35
3	Assam	0.22	0.10	11.75	6.75	11.97	6.85
4	Bihar	1.33	0.38	34.29	16.39	35.63	16.77
5	Chattisgarh	0.15	0.12	7.69	8.46	7.84	8.59
6	Goa	0.05	0.05	0.73	1.46	0.77	1.51
7	Gujarat	0.37	0.58	17.80	35.90	18.17	36.48
8	Haryana	0.26	1.58	9.55	17.57	9.80	19.15
9	Himachal Pradesh	0.06	0.06	3.91	2.46	3.97	2.51
10	Jharkhand	0.26	0.21	10.37	8.33	10.64	8.54
11	Karnataka	1.31	2.63	19.21	33.81	20.52	36.44
12	Kerala	0.46	0.58	15.58	17.12	16.04	17.70
13	Madhya Pradesh	0.58	0.45	19.09	27.64	19.67	28.09
14	Maharashtra incl. Mumbai	0.85	1.79	32.57	73.48	33.42	75.28
15	Manipur	0.02	0.01	0.90	1.21	0.91	1.22
16	Meghalaya	0.02	0.01	1.28	0.72	1.30	0.73
17	Mizoram	0.01	0.01	0.52	0.68	0.52	0.69
18	Nagaland	0.01	0.01	0.96	0.66	0.97	0.67
19	Odisha	0.35	0.12	15.33	7.99	15.68	8.11
20	Punjab	0.20	0.38	9.38	16.87	9.58	17.25
21	Rajasthan	0.62	0.67	24.32	25.96	24.93	26.63
22	Sikkim	0.005	0.003	0.32	0.36	0.32	0.36
23	Tamil Nadu incl. Chennai	0.71	1.08	16.17	42.68	16.88	43.76
24	Telangana	0.47	0.49	12.45	21.68	12.92	22.16
25	Tripura	0.02	0.02	1.03	1.11	1.05	1.13
26	Uttar Pradesh (UPE+UPW)	2.38	2.66	59.15	61.55	61.53	64.20
27	Uttarakhand	0.08	0.08	4.66	4.79	4.73	4.88
28	West Bengal incl. Kolkata	0.80	0.63	23.51	36.98	24.32	37.61
Union Territories							
1	Andaman & Nicobar Islands	0.004	0.001	0.28	0.17	0.28	0.17
2	Chandigarh	0.0004	0.02	0.04	1.31	0.04	1.33
3	Dadar & Nagar Haweli (incl. Daman & Diu)	0.01	0.01	0.27	0.52	0.28	0.53
4	Delhi	0.04	3.68	0.28	31.25	0.32	34.92
5	Jammu & Kashmir	0.13	0.07	4.16	5.19	4.29	5.26
6	Ladakh	0.002	0.004	0.25	0.08	0.25	0.08
7	Lakshdweep	0.03	0.00002	0.03	0.003	0.06	0.003
8	Puduchery	0.01	0.10	0.34	0.71	0.35	0.80
	Total	12.45	19.18	375.60	528.94	388.05	548.12
	Grand Total	31.62		904.54		936.16	

Table 1.31: Internet Subscriber Base and Market Share of top 10 Service Providers

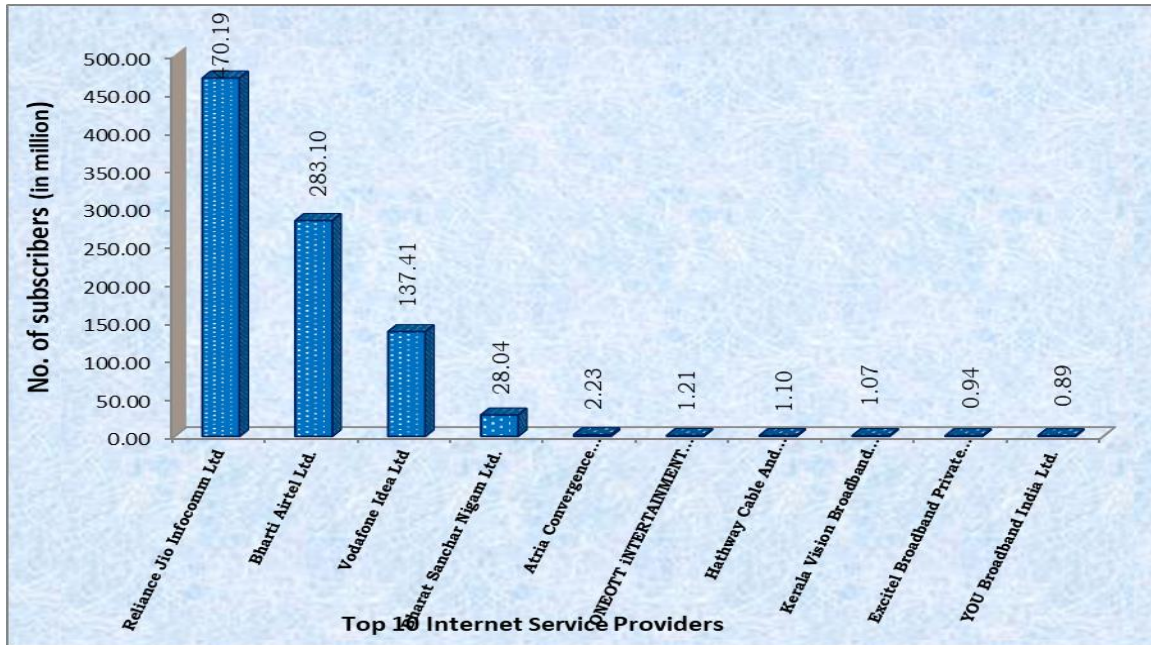
S.No	ISP	No. of Subscribers (In million)	Share (%)
1	Reliance Jio Infocomm Ltd	470.19	50.23%
2	Bharti Airtel Ltd.	283.10	30.24%
3	Vodafone Idea Ltd	137.41	14.68%
4	Bharat Sanchar Nigam Ltd.	28.04	3.00%
5	Atria Convergence Technologies Limited	2.23	0.24%
6	ONEOTT iNTERTAINMENT LIMITED	1.21	0.13%
7	Hathway Cable And Datacom Limited	1.10	0.12%
8	Kerala Vision Broadband Ltd.	1.07	0.11%
9	Excitel Broadband Private Limited	0.94	0.10%
10	YOU Broadband India Ltd.	0.89	0.10%
Total of Top 10 ISPs		926.18	98.93%
Others		9.98	1.07%
Grand Total		936.16	100

1.47 Reliance Jio holds the top position with 50.23% of market share of internet subscribers followed by Bharti Airtel Ltd with 30.24% at the QE Dec-23. M/s Vodafone Idea Ltd held the third position in respect of internet subscriber base with market share of 14.68%.

1.48 Out of total 1167 internet service providers, top 10 Service Providers together hold 98.93% of total internet subscriber base at the QE Dec-23. Detailed table of number of internet subscriber base (broadband and narrowband) of all the service providers is available at **Annexure-1.5**.

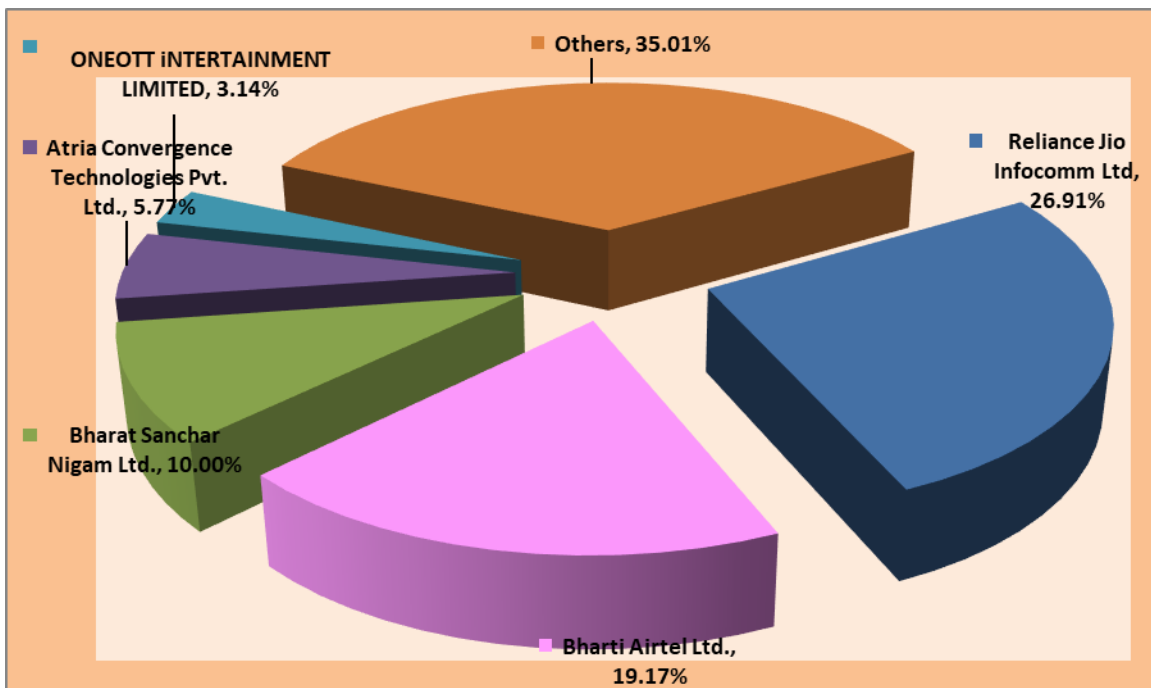
1.49 The following chart depicts the internet subscriber base of top ten Internet Service Providers (ISPs) in the QE Dec-23.

Chart 1.17 : Subscriber base of top ten ISPs



1.50 Out of total 38.57 million wired internet subscribers, Reliance Jio Infocomm Ltd holds 26.91% market share with 10.38 million subscribers, followed by Bharti with 7.39 million subscribers.

Chart 1.18: Composition of Wired Internet subscribers



1.51 In wireless internet segment, Reliance Jio holds 51.23% market share with 459.81 million subscribers followed by Bharti Airtel Ltd with 30.72% and 275.71 million wireless internet subscribers at the QE Dec-23.

Chart 1.19: - Composition of Wireless Internet subscription

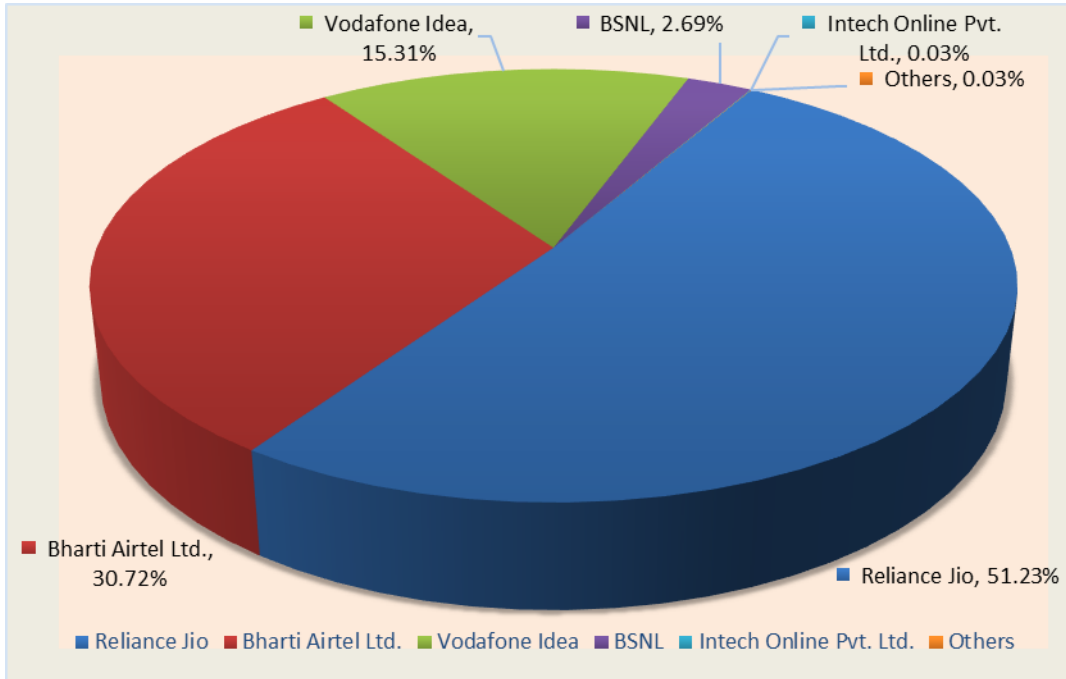


Chart 1.20 : Technology trend for Wireless Internet Access

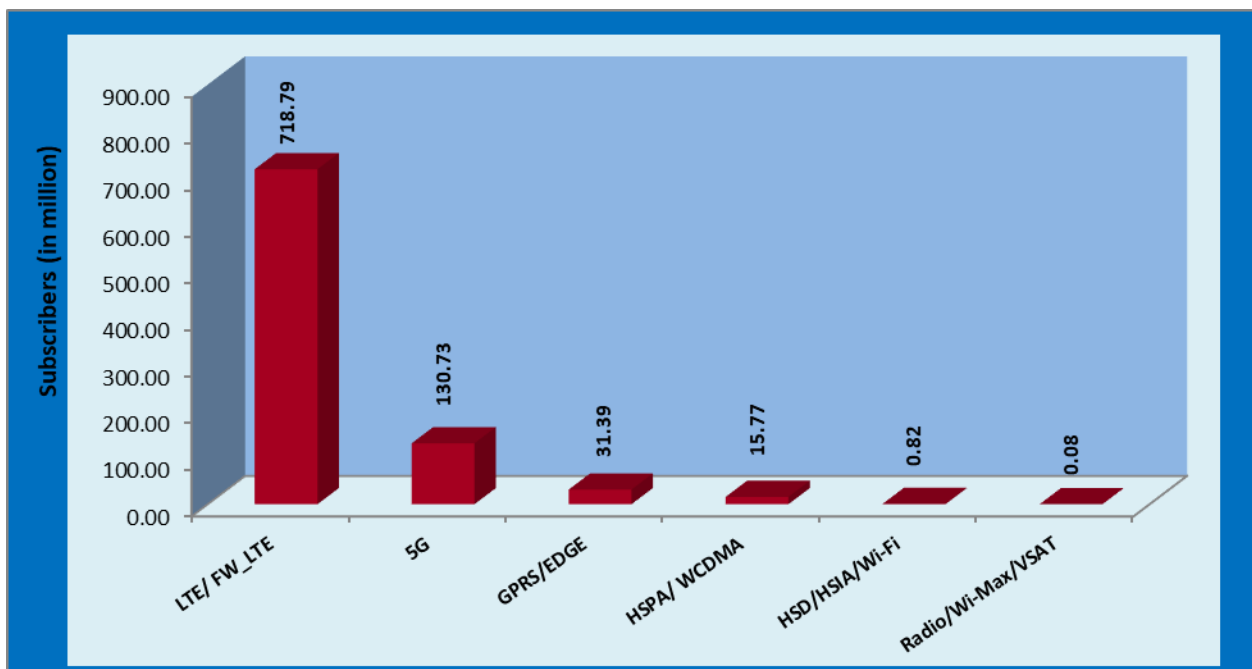
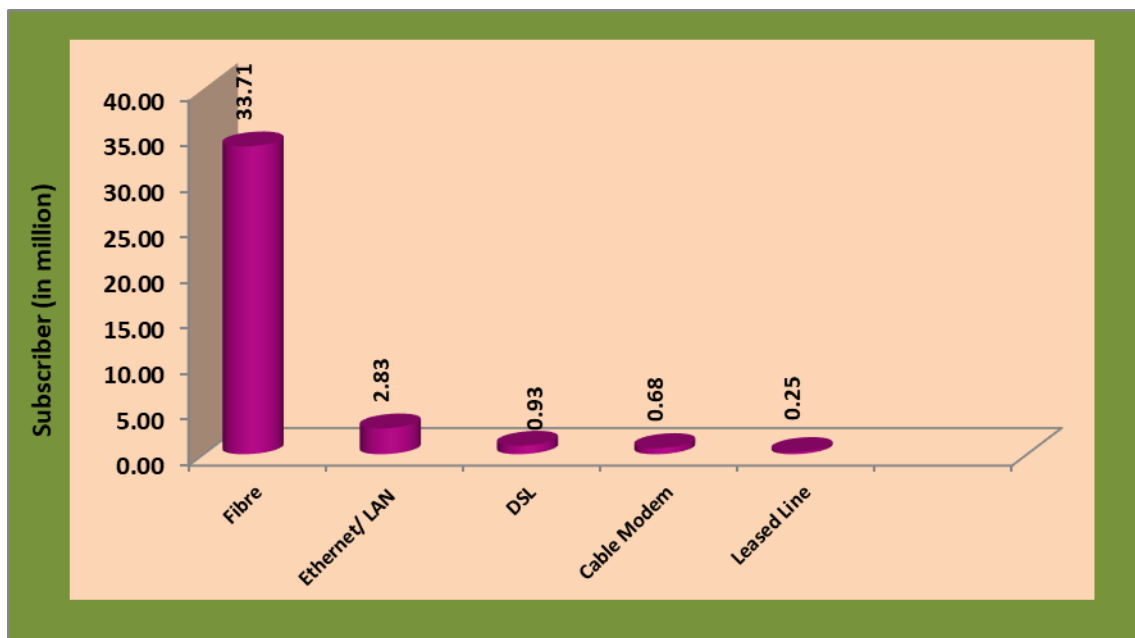


Chart 1.21: Technology trend for Wired Internet Access



1.52 Top five Telecom Service Areas in terms of internet subscriptions (wired+wireless) are: -

S. No.	Telecom Service Area	Dec-23
1	Maharashtra	79.14
2	Uttar Pradesh East	75.36
3	Bihar	71.58
4	Andhra Pradesh	69.98
5	Madhya Pradesh	64.18

Table 1.32 : Service Area wise number of Internet Subscribers per 100 population at the end of Dec-23

Service Area	Internet Subscribers (in million)			No. of Internet subscribers per 100 population		
	Rural	Urban	Total	Rural	Urban	Total
Andhra Pradesh	30.48	39.51	69.98	57.10	103.25	76.37
Assam	11.97	6.84	18.81	39.43	121.42	52.27
Bihar	46.27	25.32	71.58	32.62	96.14	42.57
Delhi	1.26	54.51	55.76	-	-	257.13
Gujarat	18.45	37.01	55.46	49.90	101.15	75.39
Haryana	9.48	10.46	19.94	54.10	80.50	65.34
Himachal Pradesh	3.97	2.52	6.49	59.08	324.52	86.51
Jammu & Kashmir	4.55	5.34	9.88	46.97	123.95	70.66
Karnataka	20.52	36.44	56.95	54.63	119.50	83.70
Kerala	16.10	17.71	33.80	195.43	63.86	93.99
Madhya Pradesh	27.51	36.67	64.18	32.70	108.58	54.43
Maharashtra	32.96	46.18	79.14	52.16	121.32	86.12
Mumbai	1.23	30.53	31.76			
North East	5.27	4.87	10.15	51.28	87.24	63.94
Orissa	15.68	8.11	23.79	43.62	95.97	53.59
Punjab	9.62	18.68	28.30	53.83	131.04	88.08
Rajasthan	24.93	26.63	51.57	41.63	121.87	63.08
Tamil Nadu	17.23	44.55	61.78	48.00	104.01	78.47
UP (East)	43.64	31.72	75.36	34.96	94.21	49.61
UP (West)	22.01	26.36	48.37			
Kolkata	1.42	17.90	19.31	39.50	101.82	62.72
West Bengal	23.51	20.26	43.77			
Total	388.05	548.12	936.16	43.06	110.66	67.03

* Population data/projections are available state-wise only.

Notes:

- No. of total internet subscribers per 100 population is derived from the subscriber data provided by the operators and the and the projection of population from the 'Report of the Technical Group on Population Projections for India and States 2011 - 2036', which is available under the link https://main.mohfw.gov.in/sites/default/files/Population%20Projection%20Report%202011-2036%20-%20upload_compressed_0.pdf
- Data/information for Andhra Pradesh includes Telengana, Madhya Pradesh includes Chhatishgarh, Bihar includes Jharkhand, Maharashtra includes Goa, Uttar Pradesh includes Uttarakhand, West Bengal includes Sikkim and North-East includes Arunachal Pradesh, Manipur, Meghalaya, Mizoram, Nagaland & Tripura states.

Table 1.33 : State/UT wise number of Internet Subscribers per 100 population at the end of Dec-23

S.N.	State(s)	Total Subscribers (In million)			Tele-density (%)		
		Rural	Urban	Total	Rural	Urban	Total
1	Andhra Pradesh	17.55	17.34	34.90	52.25	87.97	65.46
2	Arunachal Pradesh	0.51	0.35	0.86	43.89	86.18	54.82
3	Assam	11.97	6.85	18.82	39.43	121.45	52.28
4	Bihar	35.63	16.77	52.40	31.68	105.91	40.85
5	Chattisgarh	7.84	8.59	16.42	35.42	102.90	53.90
6	Goa	0.77	1.51	2.29	209.16	124.91	144.59
7	Gujarat	18.17	36.48	54.65	49.47	102.78	75.67
8	Haryana	9.80	19.15	28.95	55.96	147.38	94.88
9	Himachal Pradesh	3.97	2.51	6.49	59.08	324.51	86.51
10	Jharkhand	10.64	8.54	19.18	36.20	81.35	48.09
11	Karnataka	20.52	36.44	56.95	54.63	119.50	83.70
12	Kerala	16.04	17.70	33.74	194.72	64.00	93.99
13	Madhya Pradesh	19.67	28.09	47.76	31.73	110.45	54.62
14	Maharashtra	33.42	75.28	108.69	51.27	121.38	85.45
15	Manipur	0.91	1.22	2.14	41.80	115.27	65.78
16	Meghalaya	1.30	0.73	2.03	48.51	105.26	60.24
17	Mizoram	0.52	0.69	1.21	93.60	99.70	96.96
18	Nagaland	0.97	0.67	1.65	81.78	63.75	73.30
19	Odisha	15.68	8.11	23.79	43.62	95.97	53.59
20	Punjab	9.58	17.25	26.83	53.60	132.56	86.86
21	Rajasthan	24.93	26.63	51.57	41.63	121.87	63.08
22	Sikkim	0.32	0.36	0.69	94.90	102.86	98.94
23	Tamil Nadu incl. Chennai	16.88	43.76	60.64	47.68	105.08	78.71
24	Telangana	12.92	22.16	35.09	65.33	119.48	91.53
25	Tripura	1.05	1.13	2.18	41.99	67.29	52.14
26	Uttar Pradesh (UPE+UPW)	61.53	64.20	125.74	34.13	111.87	52.90
27	Uttarakhand	4.73	4.88	9.61	63.32	114.52	81.89
28	West Bengal incl. Kolkata	24.32	37.61	61.92	38.88	101.80	62.25
Union Territories							
1	Andaman & Nicobar Islands	0.28	0.17	0.45	126.42	94.56	112.24
2	Chandigarh	0.04	1.33	1.36	-	-	109.86
3	Dadar & Nagar Haweli (incl. Daman & Diu)	0.28	0.53	0.81	115.96	48.42	60.49
4	Delhi	0.32	34.92	35.24	-	-	162.52
5	Jammu & Kashmir	4.29	5.26	9.55	45.31	124.86	69.78
6	Ladakh	0.25	0.08	0.33	122.89	84.09	110.65
7	Lakshdweep	0.06	0.00	0.06	-	-	87.60
8	Puduchery	0.35	0.80	1.16	70.91	68.26	69.05
Total		388.05	548.12	936.16	43.06	110.66	67.03

ISP Connectivity

1.53 The International Internet bandwidth owned by various service providers is reported to be 45,838 Gbps during the quarter ending Dec-23 as compared to 42,133 Gbps during the previous quarter.

Public WiFi Hotspot

1.54 A public Wi-Fi hotspot is an area where you can access Wi-Fi enabled internet. These areas are usually created in places such as malls, coffee shops, airports, stadiums, and parks to name a few. As per the information furnished by operators, the details as on 31st December, 2023 as tabulated below. State/UT wise information on Public Wi-Fi Hotspots, as on 31st December, 2023, available at **Annexure-1.6**.

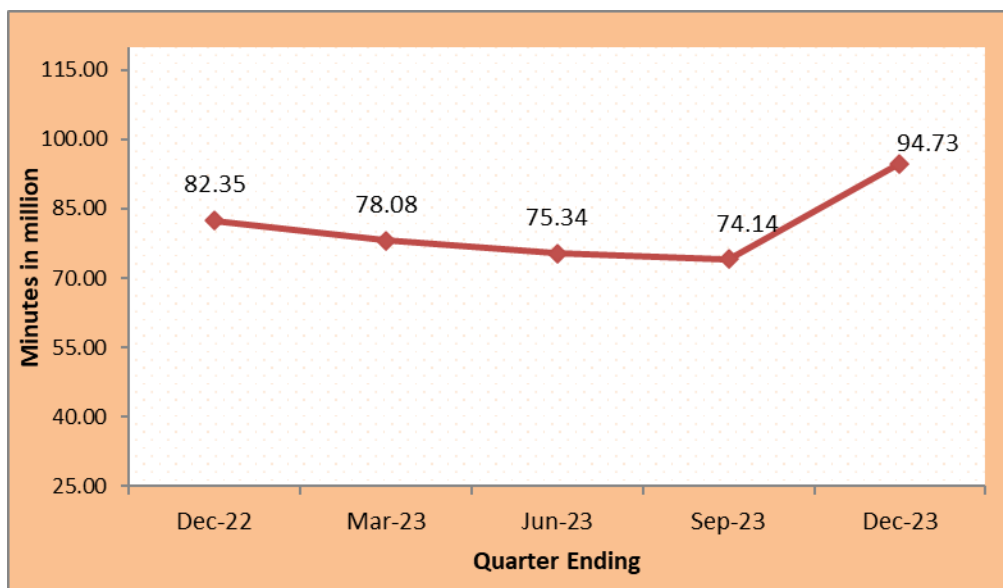
S. No.	Category	Sep-23	Dec-23	Growth (%)
1.	Public Wi-Fi Hotspots	165533	165163	-0.22%
2.	Number of Access Points	386349	384682	-0.43%
3.	Number of unique Wi-Fi Users	57599299	7932250	-86.23%*
4.	Aggregate Data Consumed (GB)	7323038	5000047	-31.72%*

* RailTel Corporation of India Ltd. has streamlined their subscriber's evaluation method.

Internet Telephony

1.55 As per the reports received from 14 service providers, providing Internet Telephony services, the total outgoing minutes of usage for internet telephony increased from 74.14 million minutes at the end of Sep-23 to 94.73 million minutes at the end of Dec-23. List of Internet Telephony Service providers is available at **Annexure-1.7**.

Chart 1.22 : Trends in MOU for Internet Telephony

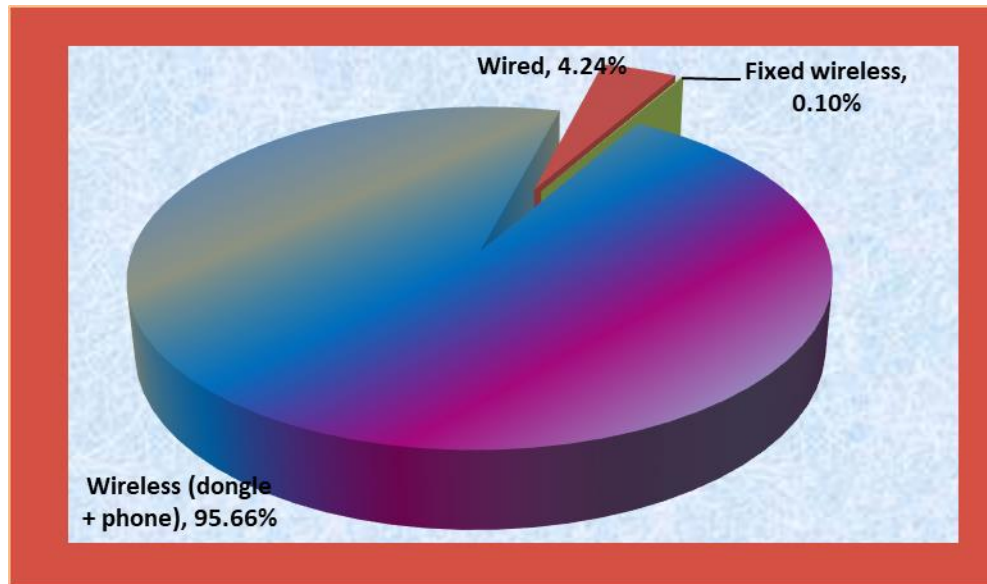


Part-II : Broadband Service (Download Speed \geq 2Mbps)

- 1.56 The total number of broadband subscribers increased from 885 million at the end of Sep-23 to 904.54 million at the end of Dec-23. Out of which number of wired broadband subscribers are 38.35 million and wireless broadband subscribers are 866.19 million.
- 1.57 Top five broadband (wired+wireless) service providers in term of subscribers are Reliance Jio 470.19 million, Bharti Airtel 264.76 million, Vodafone Idea Ltd 127.29 million, BSNL 25.12 million and Atria Convergence 2.23 million.
- 1.58 In wired broadband segment, Reliance Jio Infocomm Ltd. holds 27.06% market share with 10.38 million subscribers followed by Bharti Airtel Ltd. with 7.39 million subscribers in QE Dec-23.
- 1.59 In wireless broadband segment, Reliance Jio holds 53.08% market share with 459.81 million subscribers followed by Bharti Airtel Ltd 29.71% with 257.37 million subscribers in QE Dec-23.

1.60 Top five service areas in respect of broadband subscriptions at Q.E. Dec-23 are Maharashtra 77.33 million, U.P.-East 72.77 million, Bihar 69.40 million, Andhra Pradesh 67.82 million and Madhya Pradesh 62.89 million.

Chart 1.23 : Composition of Broadband subscription – Technology wise



1.61 Mobile Device Users (dongle+phone) constitute 95.66% of total broadband subscribers at the end of Dec-23.

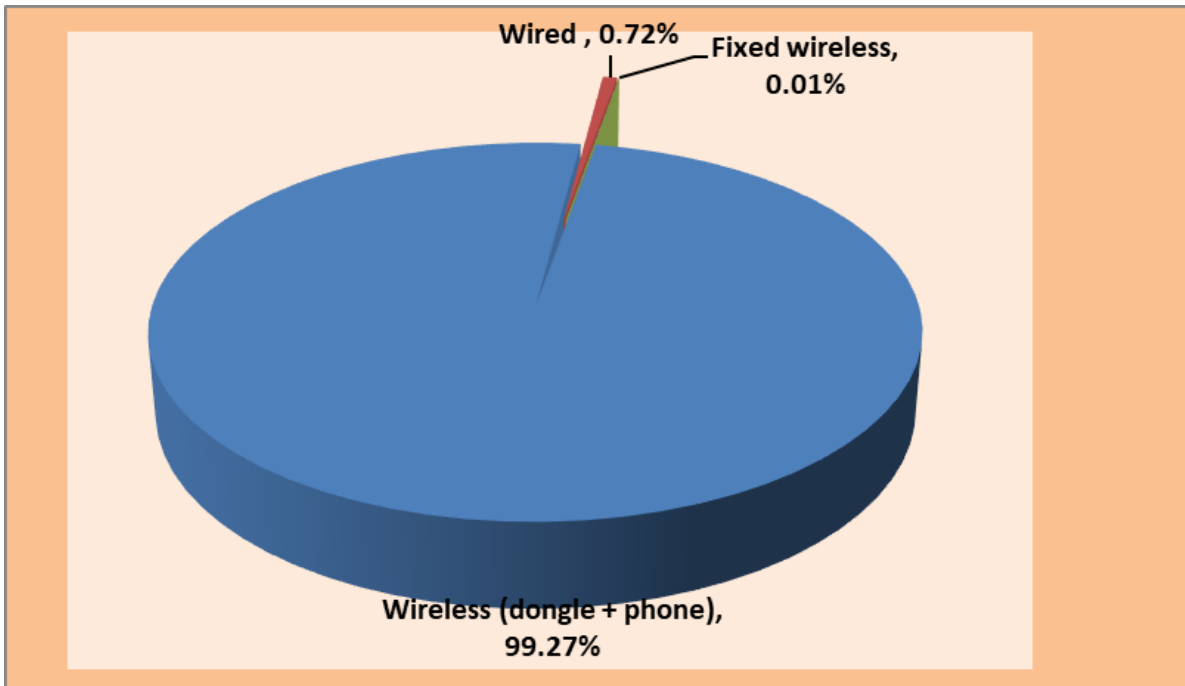
Part-III : Narrowband Service (Download Speed <2 Mbps)

1.62 Total number of narrowband subscribers decreased from 33.19 million at the end of Sep-23 to 31.62 million at the end of Dec-23 with the quarterly rate of decline 4.71%. Out of 31.62 million narrowband subscribers, Wired Narrowband subscribers are 0.23 million and Wireless Narrowband subscribers are 31.40 million.

1.63 The top five narrowband (wired+wireless) service providers in term of subscriber base are Bharti Airtel 18.34 million, Vodafone Idea Ltd 10.12 million, BSNL 2.92 million, YOU Broadband India Ltd. 0.18 million and MTNL 0.03 million at the end of Dec-23.

- 1.64 In wired narrowband segment, YOU Broadband India Ltd. hold 78.87% market share with 0.18 million subscribers followed by BSNL with 0.02 million subscribers.
- 1.65 In wireless narrowband segment, Bharti Airtel holds 58.42% market share with 18.34 million subscribers followed by Vodafone Idea Ltd with 10.12 million subscribers.

Chart 1.24 : Composition of Narrowband subscription – Technology wise



Section E: - Other Value Added Services - PMRTS & VSAT

Public Mobile Radio Trunk Services (PMRTS)

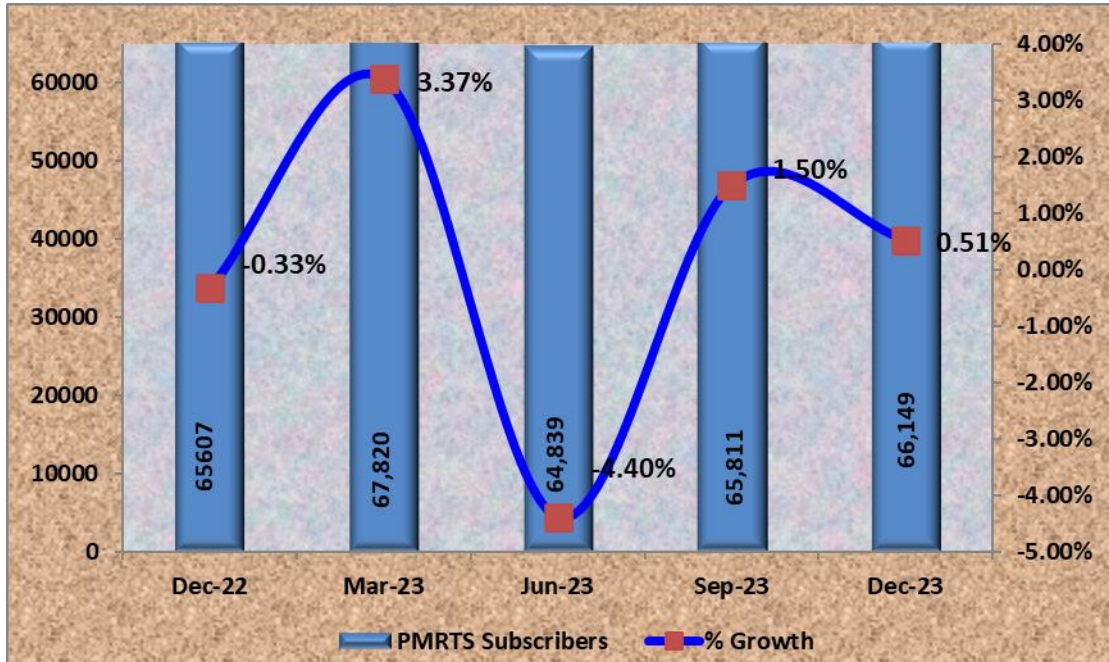
1.66 The subscriber base of PMRTS increased from 65,811 at the end of Sep-23 to 66,149 at the end of Dec-23 with quarterly rate of growth 0.51%.

Table 1.34 : PMRTS Subscriber base - Service Provider wise

Sl. No	Name of the Service Provider	Subscriber Base as on 30.09.2023	Subscriber Base as on 31.12.2023	Net Addition	% Growth in subscribers in QE Dec-23
1	Arya Omnitalk Radio Trunking Services Pvt. Ltd.	53,259	53,321	62	0.12%
2	Procall Ltd.	4,436	4,437	1	0.02%
3	Quick Call	1,921	1,949	28	1.46%
4	Inative Networks Pvt Ltd	1,820	1,820	0	0.00%
5	Smartalk Pvt Ltd	1,478	1,412	-66	-4.47%
6	Bhilwara Telenet Services Pvt Ltd	817	849	32	3.92%
7	Wiwanet Solutions Pvt Ltd	1,146	1,146	0	0.00%
8	Airtalk Solutions & Services Pvt Ltd	934	1,215	281	30.09%
Total		65,811	66149	338	0.51%

1.67 Detailed table on Service Area wise subscriber base of PMRTS as on 31st December, 2023 is available at **Annexure-1.8**.

Chart 1.25 : Number of PMRTS subscribers & Rate of Growth (%)



Very Small Aperture Terminal (VSAT)

1.68 The total number of VSAT subscribers increased from 2,53,445 at the end of Sep-23 to 2,53,530 at the end of Dec-23. Net increase during the quarter has been 85 at the rate of growth 0.03%.

Chart 1.26 : Number of VSAT Subscribers & Rate of Growth (%)



Table 1.35: - VSAT Service Providers currently providing service & their subscriber base

Sr. No	Name of Service Providers	Subscriber base at the Quarter ending		Net Addition	%age Growth	Market Share (%) Dec-23
		Sep-23	Dec-23			
1	Hughes Communications Ltd.	1,77,763	1,78,755	992	0.56%	70.51%
2	Nelco Ltd.	66,623	65,815	-808	-1.21%	25.96%
3	BSNL	6,332	6,238	-94	-1.48%	2.46%
4	Infotel Satcom	2,720	2,715	-5	-0.18%	1.07%
5	Cloudcast Digital	7	7	0	0.00%	0.00%
Total		2,52,823	253530	85	0.03%	100

1.69 Hughes Communications Ltd. is the market leader having 1,78,755 subscribers with market share of 70.51% followed by Nelco Ltd. having 65,815 subscribers with market share of 25.96% at the end of Dec-23.

1.70 In term of net addition except Hughes Communications Ltd. and Cloudcast Digital all other service providers have registered decline in their VSAT subscribers during this quarter.

Chapter 2 :

Revenue and Usage

Wireless Services

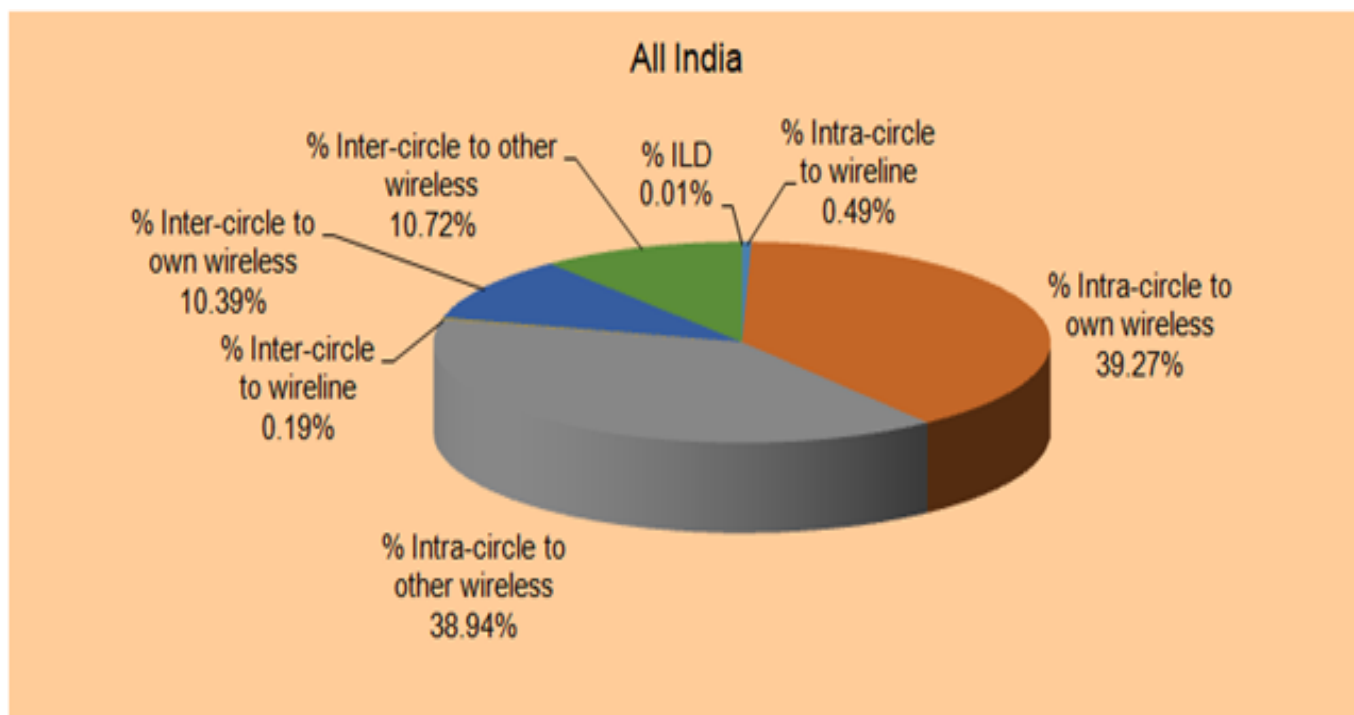
-
- For all the parameters, Metros indicate data for Delhi, Mumbai & Kolkata. Data for Chennai service area has been included in Circle A, as part of TN.
 - ARPU arrived after adjusting interconnect usage charges and roaming settlement charges.
 - The data contained in this section covers the licensees, who have been providing service during the entire period from 1st October, 2023 to 31st December, 2023 in the various service areas.

Table 2.1: Key Indicators – Wireless Services

Parameter	Dec-23	Sep-23	Dec-22	QoQ %age change	YoY %age change
Share of Prepaid (%)	92.54%	91.62%	92.21%	1.00%	0.36%
Incoming MOU per subscriber per month	473.32	473.76	459.57	-0.09%	2.99%
Outgoing MOU per subscriber per month	481.51	474.33	459.07	1.52%	4.89%
No. of Outgoing SMS per subscriber per month	11.26	11.76	12.26	-4.23%	-8.15%
Average Revenue Per User (ARPU) per month (Rs.)	152.55	149.66	141.14	1.93%	8.09%

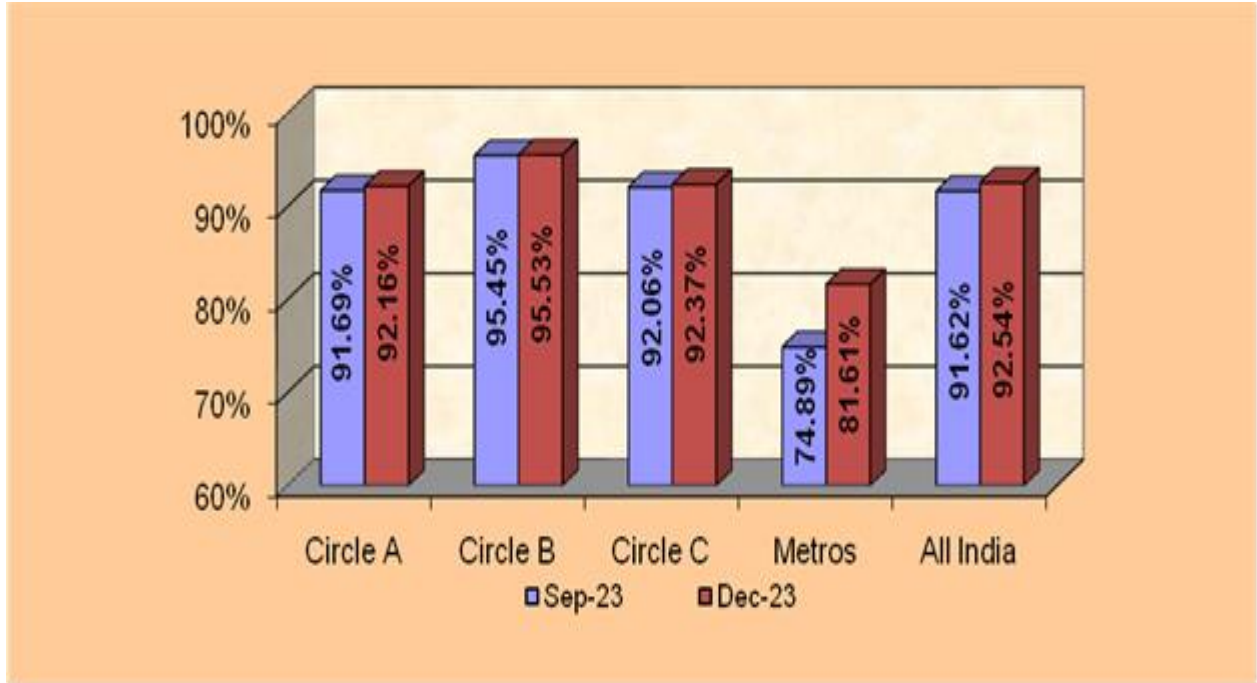
2.1 The following chart presents % break-up of outgoing minutes from Home Service Area (HSA) in the QE Dec-23.

Chart 2.1: % Break-up of Outgoing minutes from Home Service Area (HSA) during Q.E. Dec-2023



2.2 The following chart presents pre-paid subscribers as a % of total subscribers as on the last day of the respective quarters for various categories of circles.

Chart 2.2: Pre-paid subscribers as a percent of total subscribers



Note: Based on subscriber figures as on the last day of the quarter.

2.3 The Market share of pre-paid segment has increased from 91.62% at the end of Sept-2023 to 92.54% at the end of Dec-2023.

2.4 Overall blended ARPU increased by 1.93% from Rs. 149.66 in Q.E. Sept-2023 to Rs.152.55 in Q.E. Dec-2023. The ARPU for private service providers increased by 1.44% from Rs.157.61 in Q.E. Sept-2023 to Rs.159.87 in Q.E. Dec-2023 and for PSU increased by 5.41% from Rs.65.27 in Q.E. Sept-2023 to Rs.68.80 in Q.E. Dec-2023.

2.5 The ARPU per month for the pre-paid segment is Rs.149.56 and the ARPU per month for the post-paid segment is Rs.189.08 for Q.E. Dec-2023.

2.6 The following table presents the ARPU per month for various categories of circles and platforms for payment viz. post-paid and pre-paid.

Table 2.2: Monthly ARPU – Wireless Services in QE Dec-23

Circle Category	ARPU per month (in Rs.)		
	Post-paid	Pre-paid	Blended
Circle A	219.09	167.96	171.98
Circle B	159.33	140.99	141.81
Circle C	165.32	145.12	146.67
Metros	191.47	127.88	140.31
All India	189.08	149.56	152.55
All private SPs	192.66	157.08	159.87
BSNL/MTNL	121.03	66.22	68.80

2.7 The following table presents the composition of ARPU per month for QE Dec-23.

Table 2.3: Composition of ARPU per month - Wireless Services

S.No.	Item	Revenue (excl. service tax) per subscriber per month (in Rs.)	% Share of total revenue per subscriber per month
1	Usage from Home Service Area		
1.1.	Rental Revenue	0.84	0.52
1.2.	Revenue from calls	14.83	9.30
1.3.	Revenue from SMS	0.21	0.13
1.4.	Revenue from data usage	137.34	86.11
1.5.	Revenue from Other VAS	1.29	0.81
1.6.	Other revenue	3.59	2.25
2	B. Usage outside Home Service Area		
2.1	Revenue from outroamers	1.41	0.88
3	C. Total revenue from home subscribers (A+B)	159.50	100.00
4	D. Revenue from inroamers and interconnect charges received	23.11	
5	E. Total Gross Revenue (C+D)	182.61	
6	F. Net inter-operable settlement charges payable	-30.06	
7	Net Revenue (ARPU) (E+F)	152.55	

* includes Interconnect Usages Charges (IUC) and Roaming Settlement Charges (RSC).

#There is a difference in ARPU calculated by TRAI and the figures published by TSPs in their financial statements. This is because each TSP has a different methodology to calculate the ARPU. For example, one of the TSPs calculated ARPU by dividing the service revenue by the average number of subscribers during the quarter. Another TSP calculated ARPU by dividing operating revenue as given in the P&L account for the quarter by the average subscriber base for the current and previous quarters. Further, TRAI calculates ARPU per month as Quarterly Revenue adjusted for interconnect usage charges and roaming settlement charges divided by average subscribers during the quarter for its own regulatory analysis. Therefore, the different methods result in a TRAI ARPU figure being less than what a TSP would declare in its quarterly financial results or presents to investors/Credit rating agencies.

2.8 On an all-India average, the overall MOU per subscriber per month increased by 0.71% from 948 in Q.E. Sep-2023 to 955 in Q.E. Dec-2023.

2.9 The following table presents the total MOU (usage from, and outside, the home service area) per subscriber per month for various categories of circles and various platforms for payment viz. post-paid and pre-paid during Q.E. Dec-23.

Table 2.4: MOU per subscriber per month - QE Dec-23

Circle category	MOU per subscriber per month								
	Post-paid			Pre-paid			Blended		
	Outgoing MOU	Incoming MOU	Total MOU	Outgoing MOU	Incoming MOU	Total MOU	Outgoing MOU	Incoming MOU	Total MOU
Circle A	274	259	532	448	437	885	434	423	857
Circle B	270	266	536	494	490	984	484	480	964
Circle C	357	342	700	616	622	1238	597	600	1197
Metro	227	209	436	496	457	953	444	408	852
All India	275	262	536	498	491	989	482	473	955

2.10 The overall ratio of incoming MOUs and outgoing MOUs for the Q.E. Dec-2023 is 50:50.

2.11 Average number of Outgoing SMS per subscriber per month is 11 in Q.E. Dec - 2023. The following table presents the outgoing SMS usage (usage from and outside, the home service area) per subscriber per month for various categories of circles and various categories of subscribers viz. post-paid and pre-paid during Q.E. Dec-2023.

Table 2.5: No. of Outgoing SMS per subscriber per month during QE Dec-23

Circle category	Outgoing SMS per subscriber per month		
	Post-paid	Pre-paid	Blended
Circle A	14	11	11
Circle B	6	10	10
Circle C	12	15	15
Metro	7	9	8
All India	10	11	11

Chart 2.3 : Minutes of Usage by Out-roamers as a % of Total Minutes of Usage during Q.E. Dec-2023

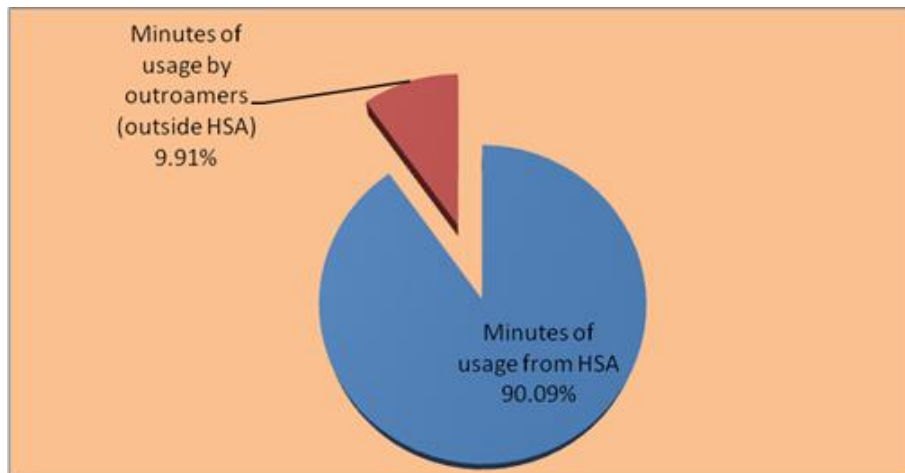
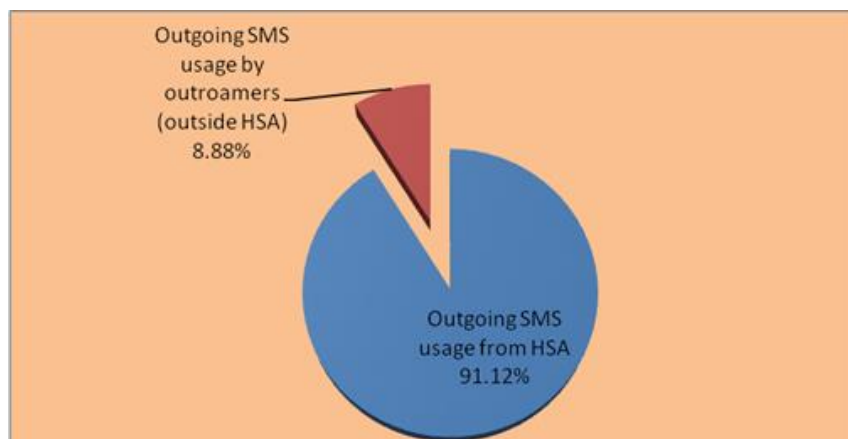


Chart 2.4: Outgoing SMS Usage by Out-roamers as a % of Total No. of Outgoing SMS Usage during Q.E. Dec-2023



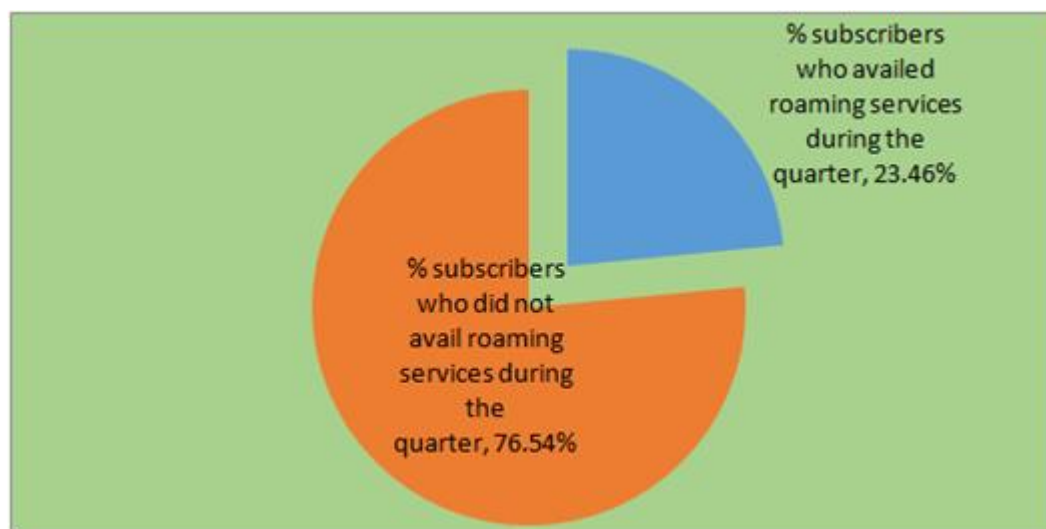
2.12 The following table presents the percentage break-up of outgoing minutes of usage from home service area between various categories of termination networks in the Q.E. Dec-23.

Table 2.6: % Break-up of Outgoing minutes from Home Service Area (HSA) during the Q.E. Dec-2023

Category	% Intra-circle to wireline	% Intra-circle to own wireless	% Intra-circle to other wireless	% Inter-circle to wireline	% Inter-circle to own wireless	% Inter-circle to other wireless	% ILD
Circle A	0.45%	41.91%	43.29%	0.16%	6.97%	7.22%	0.01%
Circle B	0.50%	38.08%	40.08%	0.17%	10.25%	10.92%	0.01%
Circle C	0.43%	41.95%	32.96%	0.19%	12.69%	11.77%	0.00%
Metros	0.76%	28.76%	31.00%	0.38%	18.61%	20.46%	0.03%
All India	0.49%	39.27%	38.94%	0.19%	10.39%	10.72%	0.01%

2.13 The following chart presents the share of outroamers (who had availed roaming services) as a percentage of total subscribers during Q.E. Dec-23.

Chart 2.5: % Share of outroamers as a percentage of total subscribers during Q.E. Dec-2023



2.14 The usage pattern of outroamers i.e. usage from outside the home service area shows that incoming minutes accounts for 47.12% of the total minutes of usage by outroamers in Q.E. Dec- 2023 as against 48.52% in the Q.E. Sept- 2023. The chart given below presents the break-up of minutes of usage of outroamers.

Chart 2.6: % Break-up of minutes of usage (MOU) of out-roamers (usage from outside the Home Service Area)

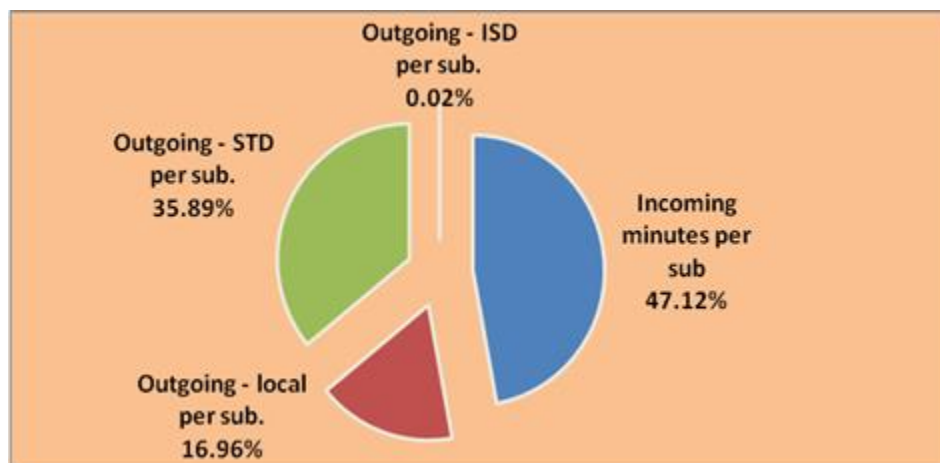


Table 2.7: Trends of Key Parameters - Wireless Services

Parameter	Dec-22	Mar-23	Jun-23	Sep-23	Dec-23
1. ARPU (Rs. Per month)	141	142	146	150	153
2. Average revenue Realization per subscriber per GB wireless data (in Rs.)	10.10	9.92	9.44	9.22	9.13
3. MOU per subscriber per month	919	946	960	948	955
4. Outgoing MOU per subscriber per month					
4.1 Local (Intra-circle)	339	350	357	350	356
4.2 NLD (inter-circle)	120	123	123	124	126
4.3 ILD	0.05	0.05	0.05	0.04	0.04
5. Average no. of Outgoing SMS per subscriber per month	12	12	12	12	11

2.15 Service Area wise statistics are available at **Annexure-2.1**.

Chapter 3 :

Financial Data of Telecom Service Sector

Table 3.1: Gross Revenue (GR), Applicable Gross Revenue (ApGR), Adjusted Gross Revenue (AGR), License Fee (LF) & Spectrum Charges

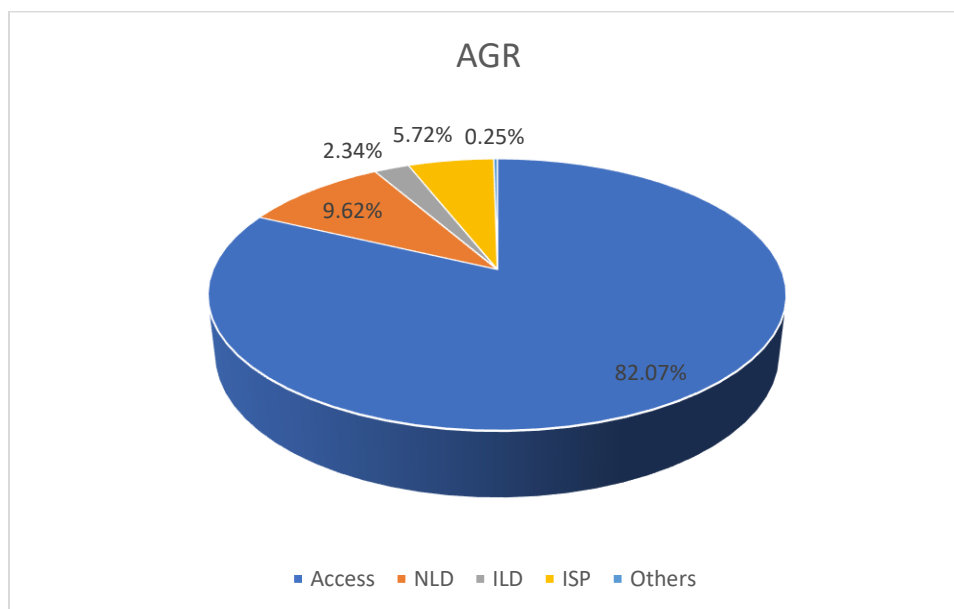
Particulars	QE Dec-22 (Rs. in Crore)	QE Sep-23 (Rs. in Crore)	QE Dec-23 (Rs. in Crore)	Q-O-Q % Change	Y-O-Y % Change
Gross Revenue (GR)	88,166	82,741	84,500	2.13%	-4.16
Applicable Gross Revenue (ApGR)	76,627	79,747	81,101	1.70%	5.84
Adjusted Gross Revenue (AGR)	62,904	66,583	67,835	1.88%	7.84
Pass Through Charges (PTC)	14,381	13,425	13,452	0.21%	-6.46
License Fee (LF)	5,031	5,326	5,433	2.01%	7.98
Spectrum Usage Charges (SUC)	811	836	845	1.06%	4.15

- 3.1 Gross Revenue (GR) increased by 2.13%, Applicable Gross Revenue (ApGR) increased by 1.70% and Adjusted Gross Revenue (AGR) increased by 1.88% during QE Dec-23. On YoY basis GR decreased by 4.16%, ApGR increased by 5.84% and AGR increased by 7.84% in QE Dec-23.
- 3.2 Pass through charges increased by 0.21% in QE Dec-23 however on YoY basis it decreased by 6.46%.
- 3.3 Pass-through charges as a percentage of Gross Revenue are 15.92% in QE Dec-23 as against 16.23% in the previous quarter.

**Table 3.2: Financial performance of service segments in Q.E. Dec, 23
(in Rs. Crore)**

Service	GR	ApGR	AGR	LF	SUC	PTC
Access Providers	67,889.98	65,922.24	55,669.76	4,453.94	840.69	10,252.48
NLD	7,578.69	6,746.44	6,523.30	522.02	-	239.65
ILD	3,493.74	3,442.14	1,588.66	132.38	-	1,853.48
ISP	5,349.49	4,866.79	3,881.79	312.43	-	1,093.88
Others	188.10	123.60	171.11	12.09	4.46	12.85
Total	84,499.99	81,101.21	67,834.62	5,432.87	845.15	13,452.34

Chart 3.1: Composition of Adjusted Gross Revenue



3.4 Access services contributed 82.07% of the total Adjusted Gross Revenue of telecom services. In Access services, Gross Revenue (GR), Applicable Gross Revenue (ApGR), Adjusted Gross Revenue (AGR), License Fee (LF), Spectrum Usage (SUC)⁹ and Pass Through Charges (PTC) increased by 2.47%, 2.53%, 2.38%, 2.37%, 1.11%, and 1.78% respectively in QE Dec-23.

Table 3.3: Access Services - Service Provider wise Adjusted Gross Revenue
(Rs.in Crore)

Service Provider	AGR			Q-o-Q Growth (%)	Y-o-Y Growth (%)
	(Rs. in Crore)				
	Q.E. Dec 2022	Q.E. Sep 2023	Q.E. Dec 2023		
Reliance Jio	22,586.32	24,217.13	24,862.85	2.67	10.08
Bharti Airtel	18,290.13	19,840.84	20,480.58	3.22	11.98
Vodafone Idea	7,328.74	7,507.65	7,459.08	-0.65	1.78
BSNL	1,985.74	1,966.44	2,011.84	2.31	1.31
Tata	574.18	617.17	655.55	6.22	14.17
MTNL	188.61	168.69	142.02	-15.81	-24.70
Reliance	51.22	47.84	45.00	-5.94	-12.15

⁹ Spectrum Usage Charge is payable by the licensees providing mobile access services, as a percentage of their Adjusted Gross Revenue (AGR).

(Source – DoT License Agreement)

Quadrant	0.75	2.66	4.76	79.12	535.25
GPX Services	2.04	3.42	3.95	15.57	93.68
V-Con Mobile & Infra	14.98	3.50	2.97	-15.17	-80.18
Tata Play Broadband	0.00	0.51	0.99	94.15	--
Shyam Spectra	0.08	0.20	0.21	4.84	171.48
Ishan Netsol	0.00	-0.01	-0.01	-1.19	--
Fusionnet	0.00	-0.01	-0.03	28.79	-355.97
Total	51,022.80	54,376.00	55,669.76		

3.5 Public Sector Undertakings' share in the Access AGR of telecom services is 3.87% in the QE Dec-23.

Table 3.4: Category-wise share in Adjusted Gross Revenue (AGR) of Access Services

LSA Category	Q.E. Dec, 2022		Q.E. Sep, 2023		Q.E. Dec, 2023	
	AGR (Rs. in crore)	% share of AGR	AGR (Rs.in crore)	% share of AGR	AGR (Rs. In crore)	% share of AGR
Metro	5,369.74	10.52	5,854.69	10.77	5,830.44	10.47
A	19,415.37	38.05	20,084.18	36.94	20,670.15	37.13
B	18,744.22	36.74	20,257.43	37.25	20,731.60	37.24
C	7,493.48	14.69	8,179.71	15.04	8,437.57	15.16
Total	51,022.80		54,376.00		55,669.76	

Notes: -

1. Figures are **un-audited** and as submitted by the TSPs.
2. A copy of quarterly Statement(s) of Revenue and Licence Fee and Spectrum Charges filed with the licensor(DoT) is submitted by Telecom Service Providers to TRAI in reference to TRAI's Order No.RP-5/13/(8)/2022/FEA-II, dated 12th December, 2022.
3. The figures have been re-grouped wherever considered necessary for analysis purpose.
4. Percentage of contribution of Five TSPs of Public Sector (BSNL, MTNL, Rail Tel, Power Grid, Oil India and Bharat Broadband) to AGR in NLD Service and two TSPs of Public Sector (BSNL/MTNL) in Access Services and BSNL in ILD Services.
5. For all the parameters metros indicate data for Delhi, Mumbai and Kolkata. Data for Chennai Service Area has been included as part of Tamil Nadu

Chapter 4 : Quality of Service (QoS)

Section A: Quality of Service of Cellular Mobile Service Providers

Table 4.1: QoS Summary - Cellular Mobile Service

Summary of Performance of Service providers against prescribed parameters

S. No.	Parameters	Bench mark	No of PMRs where Service Providers are not meeting the benchmarks			
			QE September, 2023		QE December, 2023	
			Out of 88 PMRs		Out of 88 PMRs	
			Nos.	%age	Nos.	%age
I.	Network Related Parameters					
1	Network Availability					
(a)	BS Accumulated down-time (not available for service) (%age)	≤ 2%	0	0.00%	0	0.00%
(b)	Worst affected BS due to down-time (%age)	≤ 2%	0	0.00%	0	0.00%
2	Connection Establishment (Accessibility)					
(a)	Call Set-up Success Rate and Session Establishment Success Rate for Circuit Switched Voice or VoLTE as applicable (within licensee's own network)	≥ 95%	0	0.00%	0	0.00%
(b)	SDCCH/ Paging Channel Congestion/ RRC Congestion (%age)	≤ 1%	0	0.00%	0	0.00%
(c)	TCH, RAB and E-RAB congestion (%age)	≤ 2%	0	0.00%	0	0.00%
3	Connection Maintenance (Retain ability)					
(a)	Network QoS DCR Spatial Distribution Measure [Network_ QSD (90,90)]	≤ 2%	0	0.00%	0	0.00%
(b)	Network QoS DCR Temporal Distribution	≤ 3%	0	0.00%	0	0.00%

	Measure [Network_ QTD (97,90)]					
(c)	Connections with good voice quality, Circuit Switched Voice Quality and VoLTE quality	$\geq 95\%$	0	0.00%	0	0.00%
(d)	Down Link (DL) Packet Drop Rate or DL-PDR	$\leq 2\%$	0	0.00%	0	0.00%
(e)	Up Link (UL) Packet Drop Rate or UL-PDR	$\leq 2\%$	0	0.00%	0	0.00%
4	Point of Interconnection (POI) Congestion (No. of POIs not meeting the benchmark)	$\leq 0.5\%$	0	0.00%	0	0.00%
II. Customer Service Quality Parameters						
5	Metering and billing credibility - post paid	$\leq 0.1\%$	0	0.00%	0	0.00%
6	Metering and billing credibility - prepaid	$\leq 0.1\%$	0	0.00%	0	0.00%
7 (a)	Resolution of billing/charging/validity complaints	98% within 4 weeks	0	0.00%	0	0.00%
	Resolution of billing/charging/validity complaints	100% within 6 weeks	0	0.00%	0	0.00%
(b)	Period of applying credit/ waiver/ adjustment to customer's account from the date of resolution of complaints	within 1 week of resolution of complaint	0	0.00%	0	0.00%
8	Response time to the customer for assistance					
(a)	Accessibility of call centre/ customer care	$\geq 95\%$	0	0.00%	0	0.00%
(b)	Percentage of calls answered by the operators (voice to voice) within ninety seconds	$\geq 95\%$	4	4.55%	2	2.27%
9	Termination / Closure of service	≤ 7 days	0	0.00%	0	0.00%
10	Time taken for refund of deposits after closures	100% within 60 days	0	0.00%	0	0.00%

4.1 Comparison of Performance with the last quarter: -

The performance has improved in this quarter as compared to the previous quarter in respect of the following parameters: -

- i. Percentage of calls answered by the operators (voice to voice) within ninety seconds $\geq 95\%$

Table 4.2: Parameter wise analysis of non-compliance of service providers

Service Provider	Parameter	Benchmark	Service Area	Performance in Parameters not met
AIRTEL	Percentage of calls answered by the operators (voice to voice) within ninety seconds	$\geq 95\%$	Karnataka	91.18%
BSNL	Percentage of calls answered by the operators (voice to voice) within ninety seconds	$\geq 95\%$	Tamilnadu including Chennai	93.35%

4.2 List of Parameters which are fully complied by all the Service providers: -

- a. BS Accumulated down-time (not available for service) (%age) $\leq 2\%$
- b. Worst affected BS due to down-time(%age) $\leq 2\%$
- c. Call Set-up Success Rate and Session Establishment Success Rate for Circuit Switched Voice or VoLTE as applicable (within licensee's own network) $\geq 95\%$
- d. SDCCH/ Paging Channel Congestion/ RRC Congestion (% age) $\leq 1\%$
- e. TCH, RAB and E-RAB congestion (%age) $\leq 2\%$
- f. Network QoS DCR Spatial Distribution Measure [Network_ QSD (90,90)] $\leq 2\%$

- g. Network QoS DCR Temporal Distribution Measure [Network_ QTD (97,90)] $\leq 3\%$
- h. Connections with good voice quality, Circuit Switched Voice Quality and VoLTE quality $\geq 95\%$
- i. Down Link (DL) Packet Drop Rate or DL-PDR $\leq 2\%$
- j. Up Link (UL) Packet Drop Rate or UL-PDR $\leq 2\%$
- k. Point of Interconnection (POI) Congestion (No. of POIs not meeting the benchmark) $\leq 0.5\%$
- l. Metering and billing credibility - postpaid $\leq 0.1\%$
- m. Metering and billing credibility – prepaid $\leq 0.1\%$
- n. Resolution of billing/charging/validity complaints - 98% within 4 weeks
- o. Resolution of billing/charging/validity complaints - 100% within 6 weeks
- p. Period of applying credit/ waiver/ adjustment to customer's account from the date of resolution - within 1 week of resolution of complaint
- q. Accessibility of call centre/ customer care $\geq 95\%$
- r. Termination / Closure of service ≤ 7 days
- s. Time taken for refund of deposits after closures (100% within 60 days)

4.3 The detailed table on Service Provider wise performance of QoS parameters for Cellular Mobile Services is available at **Annexure-4.1**.

Section B: Quality of Service of Basic Telephone Service (Wire Line) Providers

Table 4.3: QoS Summary - Wireline Service

Summary of Performance of service providers against identified parameters

S.No	Parameters	Benchmarks	No of PMRs where Service Providers are not meeting the benchmarks			
			QE September, 2023		QE December, 2023	
			Out of 109 PMRs		Out of 109 PMRs	
			Nos.	%age	Nos.	%age
(i)	Fault incidences No. of faults per 100 subs/month)	≤ 7	0	0.00%	0	0.00%
(ii)	% Fault repaired by next working day (for urban areas)	≥ 85%	2	1.83%	2	1.83%
	% Fault repaired within 5 days (for urban areas)	100%	2	1.83%	2	1.83%
(iii)	% Fault repaired by next working day (for rural and hilly areas)	≥ 75%	1	0.92%	1	0.92%
	% Fault repaired within 7 days (for rural and hilly areas)	100%	1	0.92%	1	0.92%
(iv)	'Mean time to Repair' (MTTR)	≤ 10 Hrs	1	0.92%	1	0.92%
(v)	'Point of Interconnection'(POI) Congestion (No. of PoIs not meeting benchmark)	≤ 0.5%	0	0.00%	0	0.00%
(vi)	Metering and billing credibility- post-paid	≤ 0.1%	0	0.00%	0	0.00%
	Metering and billing credibility- pre-paid	≤ 0.1%	0	0.00%	0	0.00%
(vii)	Resolution of billing/charging/Credit & validity complaints	98% within 4 weeks	0	0.00%	0	0.00%
	Resolution of billing/charging Credit & validity complaints	100% within 6 weeks	0	0.00%	0	0.00%

(viii)	Period of applying credit/waiver/adjustment to customer's	100% within 1 week of resolution of complaint	0	0.00%	0	0.00%
(ix)	Accessibility of call centre/ customer care	≥ 95%	2	1.83%	5	4.59%
	%age of calls answered by the operators (voice to voice) within ninety seconds	≥ 95%	4	3.67%	5	4.59%
(x)	Termination / closure of service	≤ 7 days	1	0.92%	1	0.92%
(xi)	Time taken for refund of deposits after closures	100% within 60 days	1	0.92%	2	1.83%

NOTE:

- Most of the SPs have not reported for the parameter “Metering and billing credibility – pre paid” due to not providing pre-paid service in Basic (Wire line) service.

4.4 The performance has deteriorated in this quarter as compared to the previous quarter in respect of the following parameters: -

- i. Accessibility of call centre/customer care ≥ 95%
- ii. % age of calls answered by the operators (voice to voice) within ninety seconds ≥ 95%
- iii. Time taken for refund of deposits after closures 100% within 60 days

Table 4.4: Parameter wise analysis of non-compliance of Service Providers

Parameter	Benchmark	Service Provider	Service Area	Performance in Parameters not met
% of faults repaired by next working day- Urban	For urban areas by next working day \geq 85%	MTNL	Delhi	80.85%
			Mumbai	40.10%
% of faults repaired within 5 days - Urban	For urban areas 100%	MTNL	Delhi	99.02%
			Mumbai	59.10%
% of faults repaired by next working day- Rural and hilly areas	\geq 75%	MTNL	Mumbai	0.00%
% of faults repaired within 7 days- Rural and hilly areas	100%	MTNL	Mumbai	89.00%
Mean Time to Repair (MTTR)	\leq 10 hrs	MTNL	Mumbai	112.34
Accessibility of call centre/ customer care	\geq 95%	BSNL	Andhra Pradesh	79.17%
			Karnataka	73.48%
			Kerala	54.79%
			North East	93.83%
			Tamilnadu including Chennai	56.78%
Percentage of calls answered by the operators (voice to voice) within ninety seconds	\geq 95%	BSNL	Andhra Pradesh	66.45%
			Karnataka	56.05%
			Kerala	33.64%
			North East	92.59%
			Tamilnadu including Chennai	37.11%
Termination / Closure of service	\leq 7 days	MTNL	Mumbai	98.42%
Time taken for Refund of deposits after closures- within 60 days	100% within 60 days	MTNL	Mumbai	50.27%
		TATA	Andhra Pradesh	96.94%

4.5 **List of Parameters which are fully complied by all the Service providers_**

- a. Fault incidences No. of faults per 100 subs/month ≤ 7
- b. Point of Interconnection'(POI) Congestion (No. of PoIs not meeting benchmark) $\leq 0.5\%$
- c. Metering and billing credibility- post-paid $\leq 0.1\%$
- d. Metering and billing credibility- pre-paid $\leq 0.1\%$
- e. Resolution of billing/charging/Credit & validity complaints 98% within 4 weeks
- f. Resolution of billing/charging Credit & validity complaints 100% within 6 weeks
- g. Period of applying credit/waiver/adjustment to customer's 100% within 1 week of resolution of complaint

4.6 Detailed table containing QoS parameters for all the Wireline Service Providers is given in **Annexure-4.2.**

Section C : Quality Of Service Of Service Providers Providing Broadband Service (WIRELINE)

- 4.7 There are 1089 Service Providers providing broadband (wireline) service at the end of December, 2023. Total number of broadband (wireline) subscriber base of all the broadband service providers is 3,83,47,645 in quarter ending December, 2023 as compared to 3,68,65,928 in quarter ending September, 2023.
- 4.8 Out of 1089 broadband service providers providing broadband (wireline) service, only 99 service providers are having subscriber base more than 10,000 subscribers and share 97.42% of total subscriber base in this quarter. The total number of broadband subscribers (wireline) of service providers having more than 10,000 subscriber base, has increased from 3,58,63,401 at the end of September, 2023 (for 95 service providers) to 3,73,56,823 at the end of December, 2023 (for 99 service providers).
- 4.9 This report covers performance of 99 broadband service providers' vis-à-vis the QoS benchmarks prescribed by TRAI. The summary of performance of the service providers who have not met the benchmarks in this quarter and performance of previous quarter is given in the table below: -

Table 4.5: Summary of Performance of Broadband Service Providers against identified parameters

S. No	Parameters	Benchmarks	No. of PMRs where service providers are not meeting the benchmarks			
			QE September, 2023		QE December, 2023	
			Out of 131 PMRs		Out of 138* PMRs	
			Nos.	%age	Nos.	%age
1	Service Provisioning/ Activation Time	100% in =< 15 working days				
1.2	%age of connections provided within 15 days of registration of demand	100%	1	0.76%	1	0.72%
2	Faults Repair/Restoration Time					
2.2	% of faults repaired by next working day (>90%)	>90%	1	0.76%	2	1.45%
2.3	% of faults repaired within 3 working day	=>99%	1	0.76%	3	2.17%
3	Billing Performance					
3.3	%age of bills disputed	<2%	0	0.00%	0	0.00%
3.4	%age of billing complaints resolved within 4 weeks	100% within 4 weeks	0	0.00%	0	0.00%
3.5	%age of cases to whom refund of deposits is made within 60 days of closures	100% within 60 days	1	0.76%	1	0.72%
4	Response Time to the Customer for assistance					
4.2	%age of calls answered by operator (Voice to voice) within 60 sec	>60%	0	0.00%	0	0.00%
4.3	%age of calls answered by operator (Voice to voice) within 90 sec	>80%	0	0.00%	1	0.72%
5	Bandwidth utilisation/throughput					
5.2	No. of Intra network links having Bandwidth utilisation >90% during peak hours (TCBH)	0	0	0.00%	0	0.00%

5.4	No. of Upstream links for International connectivity having bandwidth utilisation >90% during peak hours (TCBH)	0	0	0.00%	0	0.00%
5.7	% International bandwidth utilization during peak hours (TCBH) (Enclose MRTG)	<90%	0	0.00%	0	0.00%
5.8	Broadband Connection Speed available (download) from ISP node to user	>80%	0	0.00%	0	0.00%
6	Service availability /uptime (for all users) in %age					
6.3	Service availability /uptime (for all users) in %age	>98%	0	0.00%	0	0.00%
7	Packet loss (for wired broadband access) in %age	<1%	0	0.00%	0	0.00%
8	Network latency (for wired broadband access)					
8.1	User reference point at POP/ISP Gateway node to (IGSP/NIXI)	<120ms	0	0.00%	0	0.00%
8.2	User reference point at ISP Gateway node to International nearest NAP port abroad (terrestrial)	<350ms	0	0.00%	0	0.00%
8.3	User reference point at ISP Gateway node to International nearest NAP port abroad (satellite)	<800ms	0	0.00%	0	0.00%

Table 4.6: Parameter-wise analysis of non-compliance of QoS benchmarks for Broadband Service Providers

Parameters		Benchmarks	Service Provider	LSA	Performance in QE Dec.2023
Service Provisioning/ Activation Time	%age of connections provided within 15 days of registration of demand	100%	Mahanagar Telephone Nigam Ltd.	All India	96.17
Fault Repair/ Restoration Time	% of faults repaired by next working day (>90%)	>90%	Mahanagar Telephone Nigam Ltd.	All India	61.48
			Tata Play Broadband Private Limited	All India	82.86
	% of faults repaired within 3 working day	=>99%	Atria Convergence Technologies Ltd.	All India	96.86
			Mahanagar Telephone Nigam Ltd.	All India	74.38
			Tata Play Broadband Private Limited	All India	91.03
	Billing Performance	%age of cases to whom refund of deposits is made within 60 days of closures	100% within 60 days	Mahanagar Telephone Nigam Ltd.	All India
Response Time to the Customer for assistance	%age of calls answered by operator (Voice to voice) within 90 sec	>80%	Atria Convergence Technologies Ltd.	All India	76.00

4.10 List of parameters which are fully complied by all service providers: -

S. No.	Parameter	Benchmark
1	Billing Performance - %age of bills disputed	<2%
2	Billing Performance - %age of billing complaints resolved within 4 weeks	100% within 4 weeks
3	Response Time to the Customer for assistance - %age of calls answered by operator (Voice to voice) within 60 sec	>60%
4	Bandwidth utilisation/ throughput - No. of Intra network links having Bandwidth utilisation >90% during peak hours (TCBH)	0
5	Bandwidth utilisation/ throughput - No. of Upstream links for International connectivity having bandwidth utilisation >90% during peak hours (TCBH)	0
6	Bandwidth utilisation/ throughput - % International bandwidth utilization during peak hours (TCBH)	<90%
7	Bandwidth utilisation/ throughput - Broadband Connection Speed available (download) from ISP node to user	>80%
8	Service Availability/ Uptime (for all users) in %age	>98%
9	Packet loss (for wired broadband access) in %age	<1%
10	Network latency (for wired broadband access) - User reference point at POP/ISP Gateway node to IGSP/NIXI	<120 ms
11	Network latency (for wired broadband access) - User reference point at ISP Gateway node to International nearest NAP port abroad (terrestrial)	<350 ms
12	Network latency (for wired broadband access) - User reference point at ISP Gateway node to International nearest NAP abroad (satellite)	<800 ms

4.11 Detailed table containing QoS parameters for all the Broadband Service Providers is given in **Annexure-4.3**.

Performance of Cable TV, DTH and Radio Broadcasting Services

Table 5.1: Key Parameters - Broadcasting & Cable TV Services

S.No	Parameter	Sep-23	Dec-23
1	Number of Private satellite TV channels permitted by the Ministry of Information and Broadcasting (MIB) for uplinking only/downlinking only/both uplinking and downlinking	915	920*
2	Number of Pay TV Channels as reported by broadcasters	361	363
3	Total number of Multi System Operators (MSOs), who have been granted Permanent Registration (for 10 years) by Ministry of I&B for providing Cable TV services through Digital Addressable Systems (as on 31.12.2023)	995	998#
4	Number of FM Radio Stations (excluding All India Radio)	388	388
5	Number of pay DTH Operators	4	4
6	Number of existing cities with operational FM Radio channels (excluding All India Radio)	113	113
7	Number of Operational Community Radio Stations	465	479
8	Number of total active Subscribers with pay DTH operators (in million)	64.18	63.52

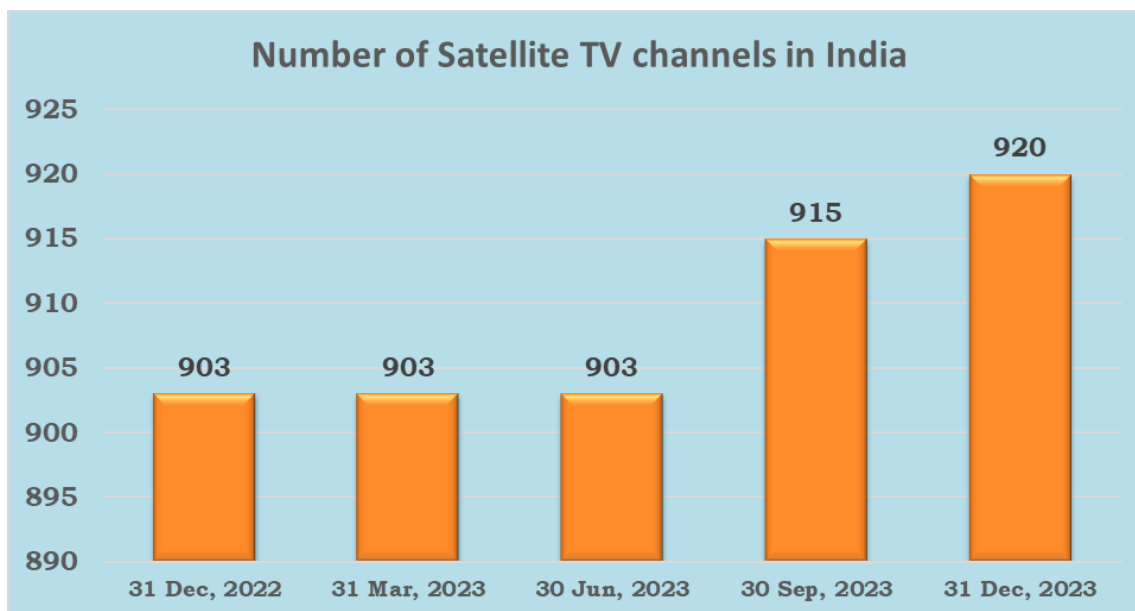
* <https://new.broadcastseva.gov.in/digigov-portal-web-app/webHP?requestType=ApplicationRH&actionVal=userInformationSystem&screenId=2>

Source- https://mib.gov.in/all_broadcasting_documents

A. Satellite TV Channels

5.1 A total of approximately 920 private satellite TV channels have been permitted by the Ministry of Information and Broadcasting (MIB) for uplinking only/downlinking only/both uplinking & downlinking. The total number of satellite TV channels is depicted in **Chart 5.1**. Further, the permission-wise number of permitted satellite TV channels is given in the **Table 5.2**.

Chart5.1- : Number of Satellite TV channels in India



Source: Ministry of I&B (broadcastseva.gov.in)

Table 5.2: Permission-wise number of permitted satellite TV channels

Type of Permission	Number of channels	Remarks
Uplinking only	10	TV channels uplinked from India but downlinked abroad only
Downlinking only	67	TV channels uplinked from abroad but downlinked only in India
Both Uplinking & downlinking	843	TV channels uplinked from India and also downlinked only in India
Total	920	

Out of 920 permitted satellite TV channels, 910 channels are available for downlinking in India.

Pay TV Channels

5.2 As per the reporting done by broadcasters in pursuance of the Tariff Order dated 3rd March 2017 as amended, out of 910 permitted satellite TV channels which are available for downlinking in India, there are 363 satellite pay TV channels as on 31st December 2023. Out of 363 pay channels, 259 are SD satellite pay TV channels and 104 are HD satellite pay TV channels. A list of pay TV channels offered by broadcasters for

subscribers as reported to TRAI is attached as **Annexure-5.1**. Apart from these pay channels reported to TRAI, all other channels, available for downlinking in India, are considered as Free to Air (FTA) channels. **Chart-5.2** depicts total number of Pay satellite TV channels and FTA satellite TV channels available for downlinking in India during last one year. **Chart-5.3** depicts total number of SD satellite Pay TV channels and HD satellite Pay TV channels during last one year.

Chart5.2: Number of Pay and FTA channels available for downlinking in India

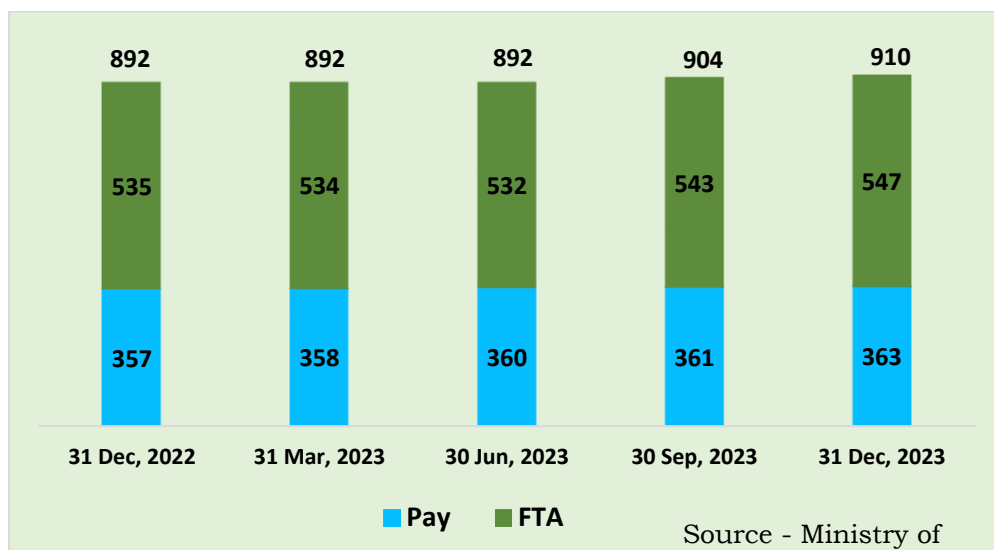


Chart 5.3 : Numbers of SD satellite pay TV channels and HD satellite pay TV channels

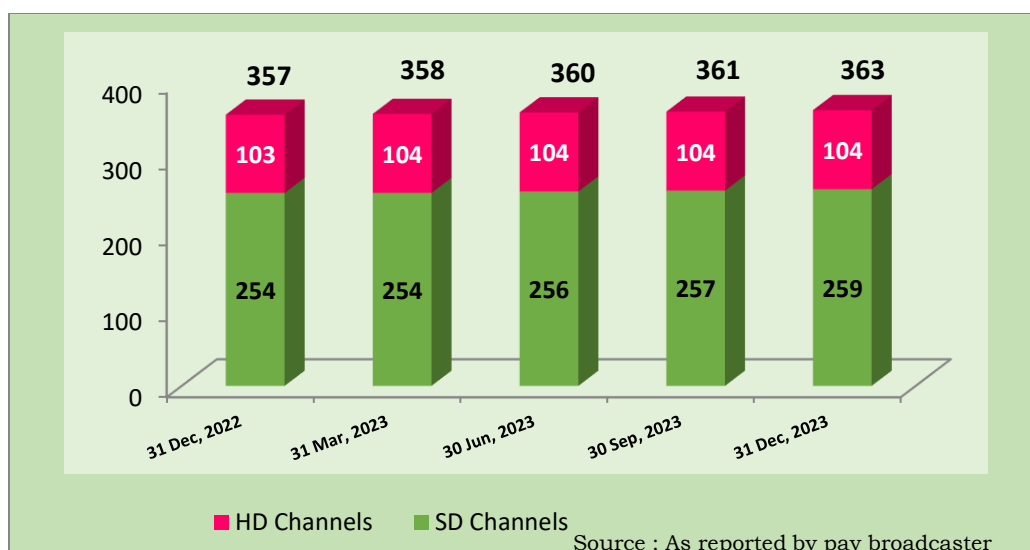


Table 5.3: Price-Range wise Analysis of Pay Channels as reported by the broadcaster to TRAI

Price range	Number of SD channels	Number of HD channels
Less than 1	58	---
1 to 5	98	12
5 to 12	48	26
12 to 15	08	05
15 to 19	07	08
19	38	52
>19	02	01
Total	259	104

Table 5.4: Genre wise Analysis of Pay Channels

S.No	Genre	Number of channels
1	General Entertainment	115
2	Movies	71
3	News and Current Affairs	62
4	Sports	34
5	Kids	28
6	Infotainment	26
7	Music	22
8	Devotional	03
9	Miscellaneous	02
Total		363

Table 5.5: Broadcaster wise number of pay channels as reported to TRAI

S.No	Name of Broadcaster	Number of channel(s)
1	Star India Private Limited	64
2	Zee Entertainment Enterprises Limited	49
3	Viacom 18 Media Private Limited	39
4	SUN TV Network Limited	31
5	Culver Max Entertainment Private Limited	22
6	TV 18 Broadcast Limited	19
7	Eenadu Television Private Limited	18
8	Zee Media Corporation Limited	16
9	Discovery Communications India	14
10	Bennett, Coleman & Company Limited	12
11	Disney Broadcasting (India) Limited	7
12	NGC Network (India) Pvt Limited	6
13	IN 10 Media Private Limited	5
14	Kalaingar TV Pvt Limited	5
15	Mavis Satcom Limited	4
16	Raj Television Network Limited	4
17	Tarang Broadcasting Company Limited	4
18	TV Today Network Limited	4
19	Warner Media India Private Limited	4
20	Celebrities Management Pvt Limited	3
21	New Delhi Television Limited	3
22	Sarthak Music Private Limited	3
23	Silverstar Communications Limited	3
24	AETN 18 Media Pvt Limited	2
25	Bangla Entertainment Private Limited	2
26	BBC Global News India Private Limited	2
27	MSM World Wide Factual Media Private Limited	2
28	Media World Wide Limited	2
29	Living Entertainment Enterprises Private Ltd	1
30	CSL Info Media Private Limited	1
31	Direct New Private Limited	1
32	Fame Media Private Limited	1
33	Greycells18 Media Limited	1
34	IBN Lokmat News Private Ltd	1
35	Information TV Private Limited	1
36	Lex Sportel Vision Private Limited	1
37	Lifestyle and Media Broadcasting Limited	1
38	Odisha Television Limited	1
39	Sidharth Broadcasting Private Limited	1
40	Suryansh Broadcasting Private Limited	1
41	Zee Akaash News Private Limited	1
42	Zoom Entertainment Network Limited	1
	Total	363

B. Cable TV Sector

5.3 As on 31st December 2023, there are 998 MSOs registered with MIB. As per the data reported by MSOs and HITS operator, as on 31st December 2023, there are 11 MSOs & 1 HITS operator who have subscriber base greater than one million. A list of such major MSOs and HITS operators is attached as **Annexure 5.2**. Details of subscriber base of major MSO and HITS Operators (greater than one million) are given in following **Table 5.6:** -

Table 5.6: Subscriber base of major MSOs/HITS operators at the end of December, 2023 (more than one million subscribers)

Sl. No.	Name of the operator	Total Active Subscriber Base (includes subscribers who have been inactive or temporarily suspended for not more than last 90 days)
1	GTPL Hathway	8,938,149
2	Siti Networks Ltd.	5,623,444
3	Hathway Digital Ltd.	5,291,794
4	Thamizha Cable TV Communication Ltd. (TCCL)	3,796,272
5	Den Networks Ltd.	3,659,758
6	Kerala Communicators Cable Ltd (KCCL)	3,430,420
7	NXT Digital Ltd. (HITS)	2,538,078
8	KAL Cables	2,033,072
9	VK Digital	1,654,549
10	Tamil Nadu Arasu Cable TV (TACTV)	1,606,299
11	Fastway Transmission Pvt. Ltd	1,431,272
12	NXT Digital Ltd. (CATV)	1,160,175

C. Direct-to-Home (DTH) Sector

- 5.4 Since its introduction in the year 2003, Indian DTH services have displayed a phenomenal growth. During the quarter ending 31st December 2023, there are 4 pay DTH service providers. A list of DTH Operators is attached as **Annexure 5.3**.
- 5.5 Pay DTH has attained total active subscriber base of around 63.52 million. This is in addition to the subscribers of the DD Free Dish (free DTH services of Doordarshan). The total active subscriber base has decreased from 64.18 million in September 2023 to 63.52 million in December 2023.
- 5.6 Quarterly growth in the DTH sector in terms of the total active subscriber base and market share of DTH operators in terms of percentage of total active subscribers during the quarter ending 31st December, 2023 is depicted in the following charts: -

Chart 5.4: - Total active subscriber base of pay DTH sector (in millions)

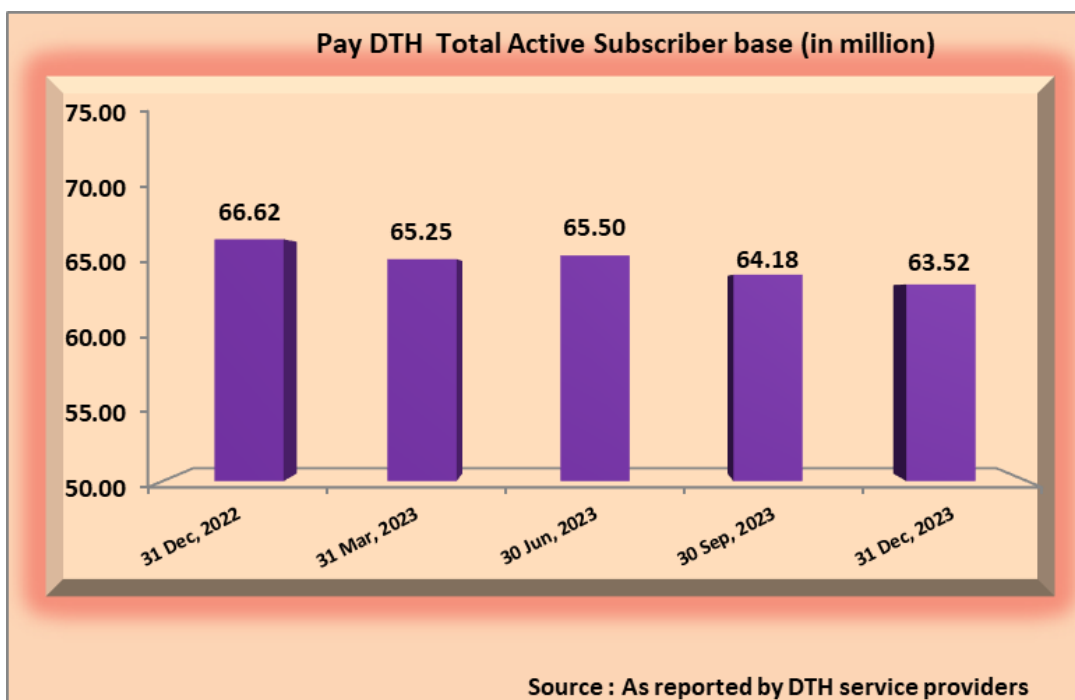
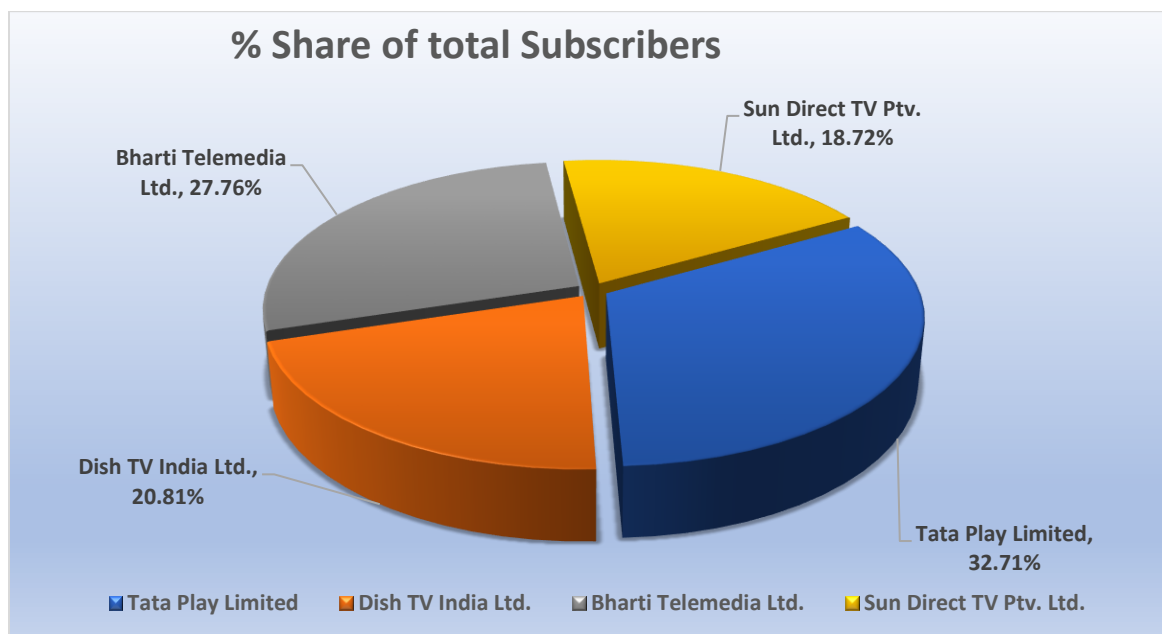


Chart 5.5 : Market share of DTH Operators



Source : As reported by DTH service providers

D. IPTV

As per information provided by the Ministry of Information and Broadcasting (MIB), as on 31.12.2023, there are 28 IPTV Operators. A list of such IPTV Operators is attached as **Annexure 5.4**. At present, as per the reported subscriber figures, the details in respect of IPTV operators who are operational is as under: -

S.No.	Name of IPTV Operator	Total Active Subscriber Base as on Dec 2023
1.	Andhra Pradesh State Fibernet Ltd (APSFL)	5,82,317
2.	M/s City Online Media Pvt. Ltd	2,134
3.	M/s Wi-bro Solutions Pvt. Ltd	1,187
4.	M/s V.K. Digital Network Pvt. Ltd	40

E. FM Radio Services

5.7 Apart from the radio channels operated by All India Radio – the public broadcaster, as per the data reported by FM Radio operators to TRAI, as on 31st December 2023, there are 388 operational private FM Radio

channels in 113 cities operated by 36 private FM Radio operators. As compared to the previous quarter, there is no change in the number of operational private FM Radio channels, cities and FM Radio operators. A list of 113 existing cities with operational private FM radio channels in India, as on 31st December, 2023 is attached at **Annexure 5.5**. The following **chart 5.6** depicts the quarterly growth in private FM Radio stations.

Chart 5.6 : Number of Private FM Radio channels

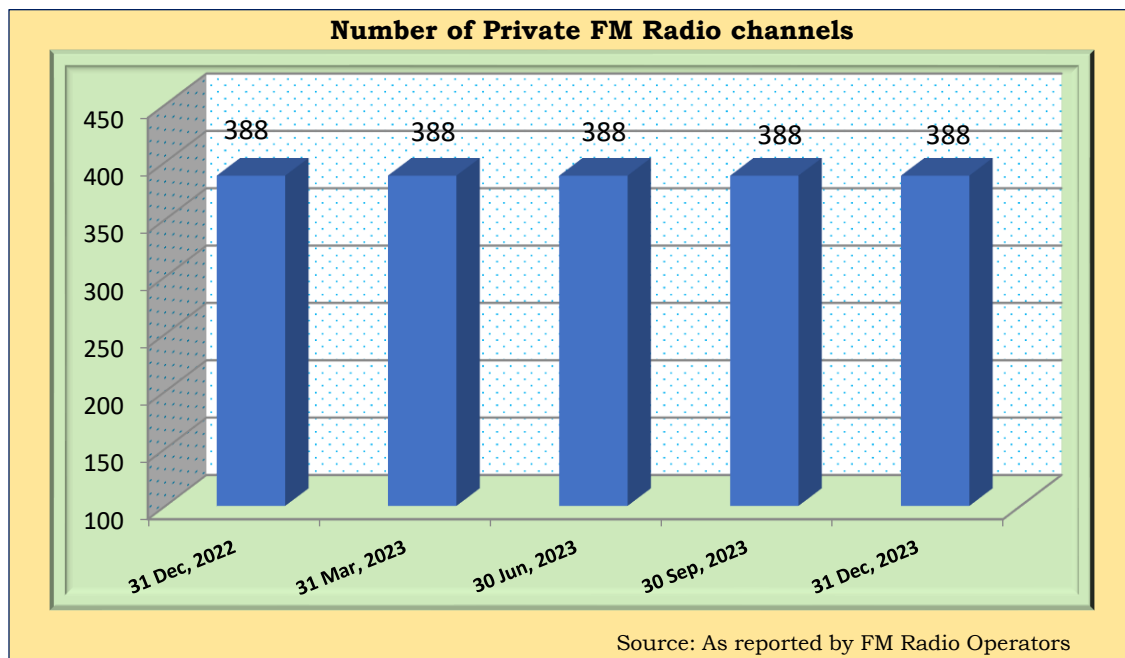
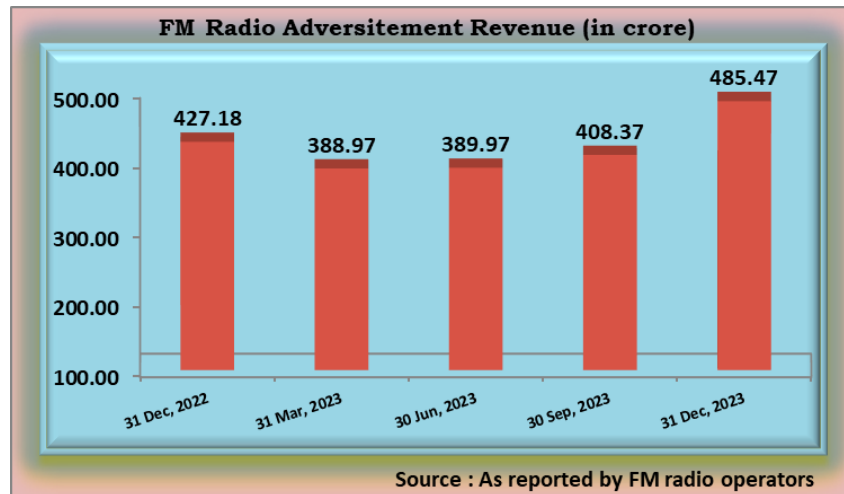


Table 5.7: FM Radio operators in terms of number of FM Radio channels they possess.

S.No.	Name of FM Operator	Number of Channels
1	Entertainment Network (India) Limited	73
2	Reliance Broadcast Network Limited	58
3	Music Broadcast Limited (MBL)	39
4	South Asia FM Limited	35
5	D B Corp Limited (Radio Division)	30
6	KAL Radio Limited	24
7	Rajasthan Patrika Pvt. Ltd	18
8	HT Media Ltd	14
9	Sambhaav Media Limited	13
10	Malar Publications Ltd.	10
11	Skyline Radio Network	10
12	Next Radio Limited	7
13	The Mathrubhumi Printing & Publishing Co.	6
14	The Malayala Manorama Co. Ltd.	5
15	Purvy Broadcasting Pvt Ltd	5
16	Ushodaya Enterprises Pvt Ltd	4
17	Digital Radio (Delhi) Broadcasting Ltd	3
18	SUN TV Network Ltd	3
19	TV Today Network Limited	3
20	Abhijit Realtors & Infra P Ltd	3
21	Digital Radio (Mumbai) Broadcasting Ltd	2
22	India Radio Ventures Pvt. Ltd.	2
23	Eastern Media Ltd	2
24	Pudhari Publicattions Pvt. Ltd.	2
25	Neutral Publishing House Ltd	2
26	PCM Cement Concrete Pvt Ltd	2
27	JCL Infra Limited	4
28	Digital Radio (Kolkata) Broadcasting Ltd	1
29	Clear Media (India) Pvt Limited	1
30	Ananda Offset Pvt Ltd.	1
31	HT Music & Entertainment Company Ltd	1
32	Udaya FM Pvt. Ltd.	1
33	Sarthak Films Private Limited	1
34	ITM Software & Entertainment Pvt Ltd	1
35	Gwalior Farms Private Limited	1
36	Renderlive Films and Entertainment Pvt. Ltd	1
	Total Number of Channels	388

5.8 The advertisement revenue reported by FM Radio operators during the quarter ending 31st December 2023 in respect of 388 private FM Radio channels is Rs 485.47 crore as against Rs 408.37 crore in respect of 388 private FM Radio channels for the previous quarter i.e. 30th September.

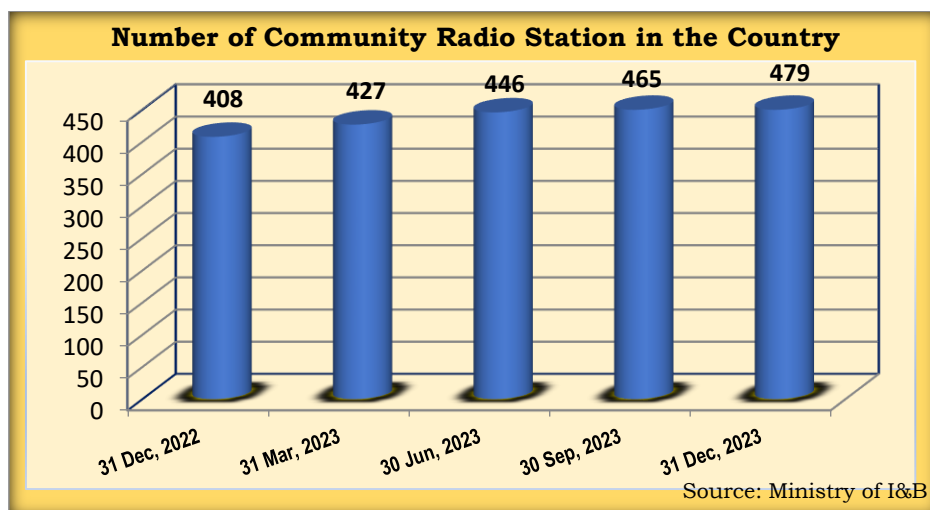
Chart 5.7: Details of Advertisement Revenue submitted by the private FM Radio broadcasters



F. Community Radio

5.9 As on 31st 2023, 479 Community Radio stations are operational. The quarterly growth in the number of operational community radio stations during last one year is depicted in the following **chart 5.8**.

Chart 5.8: Number of operational Community Radio Stations



Annexures

Annexure 1.1: Wireless Subscriber Base

Service Area	Vodafone Idea		Bharti Airtel (including Tata Teleservices)		Reliance Com.		BSNL		MTNL		Reliance Jio		Total		Net Additions
	Sep-23	Dec-23	Sep-23	Dec-23	Sep-23	Dec-23	Sep-23	Dec-23	Sep-23	Dec-23	Sep-23	Dec-23	Sep-23	Dec-23	
Andhra Pradesh	11007032	10889776	33157725	33456471			6631388	6526093			31377637	32181993	82,173,782	83,054,333	880551
Assam	1803134	1689221	11475925	11635040			3192009	3135849			9041371	9273525	25,512,439	25,733,635	221196
Bihar	7840736	7685625	40649017	41196724			5397055	5212767			39157555	39960736	93,044,363	94,055,852	1011489
Delhi	16583934	16594404	17633421	17944995	23	23			1688013	1686812	19487598	19780346	55,392,989	56,006,580	613591
Gujarat	21512053	20936910	11575256	11696221	43	43	4416610	4408539			28524098	29363638	66,028,060	66,405,351	377291
Haryana	6979837	6848050	6710871	6913441	11	11	4212788	4334735			8435967	8570228	26,339,474	26,666,465	326991
Himachal Pradesh	412534	404470	3564011	3565663	92	92	1603113	1549857			3334263	3330986	8,914,013	8,851,068	-62945
Jammu & Kashmir	308207	302053	5933139	5889912	0	0	826820	802417			5195889	5172959	12,264,055	12,167,341	-96714
Karnataka	6586621	6478767	31719386	31952810	574	574	4410678	4224679			22939501	23596740	65,656,760	66,253,570	596810
Kerala	14028432	13703637	8353158	8472706	113	113	9652694	9378546			10540914	10830851	42,575,311	42,385,853	-189458
Madhya Pradesh	16249668	15839576	15736984	15898273	0	0	4983465	4808578			40652254	41814615	77,622,371	78,361,042	738671
Maharashtra	23360391	22913859	21314679	21533174	0	0	6143342	5857052			42548318	43085341	93,366,730	93,389,426	22696
Mumbai	11147788	11254136	9999773	9994591	877	877			263470	251914	12464221	12848855	33,876,129	34,350,373	474244
North East	866774	811436	6114788	6217335	0	0	1,263,328	1,252,368			4123251	4191746	12,368,141	12,472,885	104744
Orissa	1536700	1501230	11428063	11462775	29	29	5,757,087	5,450,152			14485859	14851441	33,207,738	33,265,627	57889
Punjab	6719723	6545598	12398186	12532709	106	106	4,138,828	4,118,815			11750685	11935545	35,007,528	35,132,773	125245
Rajasthan	11261139	11008394	22971737	23079164	155	155	5,677,644	5,660,820			25617046	26285709	65,527,721	66,034,242	506521
Tamil Nadu	16220684	15960200	28716722	29098516	238	238	7,744,795	7,683,541			24982881	25473310	77,665,320	78,215,805	550485
UP(E)	17911800	17377795	36872197	37050222	0	0	8,096,415	8,244,426			37462411	38846885	100,342,823	101,519,328	1176505
UP(W)	15896482	15566328	18300702	18663992	8	8	4,957,432	4,940,774			23159191	23813944	62,313,815	62,985,046	671231
Kolkata	5566595	5421655	5687333	5696375	0	0	2189565	2026790			10586050	10724998	24,029,543	23,869,818	-159725
West Bengal	13734392	13315440	17467498	17779617	115	115	2,376,102	2,339,459			23343486	23877462	56,921,593	57,312,093	390500
Total	227,534,656	223,048,560	377,780,571	381,730,726	2,384	2,384	93,671,158	91,956,257	1,951,483	1,938,726	449,210,446	459,811,853	1,150,150,698	1,158,488,506	8337808

Annexure 1.2: Wireline Subscriber Base

Sl. No	Service Area	Bharti Airtel		Reliance Com.		Quadrant		Tata Tele.		MTNL		BSNL		Vodafone Idea		Reliance Jio		VM IPL		AP SFL		Total		Net Additions
		Sep-23	Dec-23	Sep-23	Dec-23	Sep-23	Dec-23	Sep-23	Dec-23	Sep-23	Dec-23	Sep-23	Dec-23	Sep-23	Dec-23	Sep-23	Dec-23	Sep-23	Dec-23	Sep-23	Dec-23	Sep-23	Dec-23	
1	Andhra Pradesh	548140	601545	19330	18583			238476	234829			538627	518960	60365	70125	1224712	1312616			650291	647657	3,279,941	3,404,315	124,374
2	Assam	26497	29412	0	0			0	0			102314	101612	2610	2610	173159	181527					304,580	315,161	10,581
3	Bihar	95801	141956	9	9			10196	11142			163988	165076	2380	2350	497866	524266					770,240	844,799	74,559
4	Delhi	2050747	2085938	19856	18389			211662	209288	1007942	997806			78660	79301	938468	951578					4,307,335	4,342,300	34,965
5	Gujarat	237380	256715	2872	2863			159596	165671			288865	290294	55916	67666	625954	668992					1,370,583	1,452,201	81,618
6	Haryana	140842	150563	0	0			44917	43418			200238	188136	420	420	124748	132000					511,165	514,537	3,372
7	Himachal Pradesh	7041	7999	0	0			1483	1494			89392	87875	90	90	56343	58715					154,349	156,173	1,824
8	Jammu & Kashmir	99374	107478	0	0			0	0			79011	74196	30	30	199610	204993					378,025	386,697	8,672
9	Karnataka	1147739	1189445	17386	17436			416301	405944			530227	524521	133068	138230	888416	954149					3,133,137	3,229,725	96,588
10	Kerala	98179	102222	3293	3283			19773	19805			994280	979037	6880	6880	279712	296641					1,402,117	1,407,868	5,751
11	Madhya Pradesh	490042	525515	5	5			53612	57676			238493	241956	39540	50210	675638	726128					1,497,330	1,601,490	104,160
12	Maharashtra	445156	464548	8292	8100			225824	222777			557923	550332	20971	20411	258812	289121					1,516,978	1,555,289	38,311
13	Mumbai	578479	591988	38549	37695			606007	592082	1,236,917	1,215,724			166891	164151	851016	873204					3,477,859	3,474,844	-3,015
14	North East	0	0	0	0			0	0			70254	71699	510	510	163285	177512					234,049	249,721	15,672
15	Orissa	26615	43537	4	4			10749	12464			166603	152010	3660	3340	245346	257357					452,977	468,712	15,735
16	Punjab	253432	263997	1893	1878	374924	394970	16673	16649			369842	374795	1830	1800	324507	346933	17549	21479			1,360,650	1,422,501	61,851
17	Rajasthan	232891	256441	3492	3473			24284	24452			269507	262526	12425	12515	375989	396894					918,588	956,301	37,713
18	Tamil Nadu	875356	898548	16146	15525			141276	136757			931048	900733	33733	34113	784268	832680					2,781,827	2,818,356	36,529
19	U.P. (E)	198853	207715	37	34			10970	10564			119422	120634	16600	16700	495555	524966					841,437	880,613	39,176
20	U.P. (W)	130892	136343	8	8			6836	7018			177738	176086	3601	3631	550996	587880					870,071	910,966	40,895
21	Kolkata	200076	201491	4617	4636			64199	63439			182566	182395	15055	14890	483330	504778					949,843	971,629	21,786
22	West Bengal	44199	50327	69	49			2784	2623			179355	177162	150	150	238715	246821					465,272	477,132	11,860
	Total	7,927,731	8,313,723	135,858	131,970	374,924	394,970	2,265,618	2,238,092	2,244,859	2,213,530	6,249,693	6,140,035	655,385	690,123	#####	11,049,751	17,549	21,479	#####	647,657	30,978,353	31,841,330	862,977

Annexure 1.3: Service Area and Service Provider-wise details of PCOs

Sl. No.	Name of Telecom Service Area	Service Provider	Number of PCOs as on 30.09.2023	Number of PCOs as on 31.12.2023	Net PCO increase/ decrease as on 31.12.2023	Percentage Growth/ Decline as on 31.12.2023
1	Andhra Pradesh	Bharat Sanchar Nigam Limited	2876	2608	-268	-9.32%
2	Assam	Bharat Sanchar Nigam Limited	443	382	-61	-13.77%
3	Bihar	Bharat Sanchar Nigam Limited	90	32	-58	-64.44%
4	Delhi	MTNL	1887	1587	-300	-15.90%
5	Gujarat	Bharat Sanchar Nigam Limited	1641	1503	-138	-8.41%
6	Haryana	Bharat Sanchar Nigam Limited	133	125	-8	-6.02%
7	Himachal Pradesh	Bharat Sanchar Nigam Limited	46	6	-40	-86.96%
8	Jammu & Kashmir	Bharat Sanchar Nigam Limited	110	89	-21	-19.09%
9	Karnataka	Bharat Sanchar Nigam Limited	1575	1662	87	5.52%
10	Kerala	Bharat Sanchar Nigam Limited	2561	2335	-226	-8.82%
11	Kolkata	Bharat Sanchar Nigam Limited	553	535	-18	-3.25%
12	Madhya Pradesh	Bharat Sanchar Nigam Limited	571	525	-46	-8.06%
13	Maharashtra	Bharat Sanchar Nigam Limited	2844	2432	-412	-14.49%
	Mumbai	MTNL	5504	4633	-871	-15.82%
15	North East	Bharat Sanchar Nigam Limited	254	217	-37	-14.57%
16	Odisha	Bharat Sanchar Nigam Limited	0	0	0	0.00%
17	Punjab	Bharat Sanchar Nigam Limited	552	348	-204	-36.96%
		Quadrant Televentures Ltd.	307	300	-7	-2.28%
18	Rajasthan	Bharat Sanchar Nigam Limited	148	85	-63	-42.57%
19	TN including Chennai	Bharat Sanchar Nigam Limited	6971	6195	-776	-11.13%
20	UP - East	Bharat Sanchar Nigam Limited	1029	560	-469	-45.58%
21	UP - West	Bharat Sanchar Nigam Limited	535	520	-15	-2.80%
22	West Bengal	Bharat Sanchar Nigam Limited	13	13	0	0.00%
	Total		30643	26692	-3951	-12.89%

Annexure 1.4: Service Area and Service Provider wise details of Village Public Telephones (VPTs)

S.NO	Name of Telecom Service Area	Service Provider	Number of VPTs as on 30.9.2023	VPT Rural	VPT Urban	Number of VPTs as on 31.12.2023	Net VPTs increase/decrease as on 31.12.2023	Percentage Growth/Decline as on 31.12.2023
1	Andhra Pradesh	BSNL	2,896	2,896	0	2,896	0	0.00%
2	Assam	BSNL	105	105	0	105	0	0.00%
3	Bihar	BSNL	6,114	6,114	0	6,114	0	0.00%
4	Delhi	BSNL						
5	Gujarat	BSNL	5,278	5,278	0	5,278	0	0.00%
6	Haryana	BSNL	462	462	0	462	0	0.00%
7	Himachal Pradesh	BSNL	1,875	1,875	0	1,875	0	0.00%
8	Jammu & Kashmir	BSNL	810	810	0	810	0	0.00%
9	Karnataka	BSNL	3,656	3,656	0	3,656	0	0.00%
10	Kerala	BSNL	331	331	0	331	0	0.00%
11	Kolkata	BSNL	130	130	0	130	0	0.00%
12	Madhya Pradesh	BSNL	10,100	10,100	0	10,100	0	0.00%
13	Maharashtra	BSNL	7,846	7,846	0	7,846	0	0.00%
14	Mumbai	BSNL						
15	North East	BSNL	1,182	1,182	0	1,182	0	0.00%
16	Odisha	BSNL	1,554	1,554	0	1,554	0	0.00%
17	Punjab	BSNL	4,493	4,493	0	4,493	0	0.00%
18	Rajasthan	BSNL						
19	TN including Chennai	BSNL	5,478	5,478	0	5,478	0	0.00%
20	UP - East	BSNL	568	568	0	568	0	0.00%
21	UP - West	BSNL	3,758	3,758	0	3,758	0	0.00%
22	West Bengal	BSNL	11,970	11,970	0	11,970	0	0.00%
	Total		68,606			68,606	0	0.00%
	Total (In Lakh)		0.69			0.69	0.00	0.00%

**Annexure 1.5: Internet Service Provider (ISP) wise Internet Subscriber base
as on 31.12.2023**

S.No.	Name of Service Provider	Narrowband	Broadband	Total
1	Reliance Jio Infocomm Ltd	0	470190296	470190296
2	Bharti Airtel Ltd.	18341489	264761728	283103217
3	Vodafone Idea Ltd	10122937	127285308	137408245
4	Bharat Sanchar Nigam Ltd.	2923157	25117517	28040674
5	Atria Convergence Technologies Limited	0	2226126	2226126
6	ONEOTT iNTERTAINMENT LIMITED	0	1210933	1210933
7	Hathway Cable And Datacom Limited	0	1100346	1100346
8	Kerala Vision Broadband Ltd.	0	1068172	1068172
9	Excitel Broadband Private Limited	0	942633	942633
10	YOU Broadband India Ltd.	181496	709751	891247
11	GTPL Broadband Pvt. Ltd.	0	800166	800166
12	Netplus Broadband Services Pvt. Ltd	0	716575	716575
13	RailTel Corporation of India Ltd.	0	560726	560726
14	ALLIANCE BROADBAND SERVICES PVT. LTD.	0	551146	551146
15	Andhra Pradesh State Fiber Net Limited	0	512310	512310
16	Tata Play Broadband Private Limited	0	478285	478285
17	Asianet Satellite Communications Ltd.	0	460435	460435
18	Mahanagar Telephone Nigam Limited	30131	409237	439368
19	Intech Online Pvt. Ltd.	0	327344	327344
20	Blue Lotus Support Services Pvt Ltd. formerly Limras Eronet Broadband Service Pvt Ltd	0	274988	274988
21	Pioneer eLabs Limited	0	267875	267875
22	Quadrant Televentures Ltd.	71	262343	262414
23	Tikona Infinet Ltd.	0	203624	203624
24	Ani Broadband Service Pvt. Ltd.	0	153748	153748
25	Antariksh Softtech Private Limited	0	134649	134649
26	Indinet Service Pvt. Ltd.	0	133704	133704
27	Siti Broadband Services Pvt. Limited	0	131542	131542
28	Excell Media Pvt. Ltd.	0	130025	130025
29	Wish Net Pvt. Ltd.	0	124813	124813
30	Airnet Cable and Datacom Pvt. Ltd.	0	119212	119212
31	GTPL KCBPL Broadband Private Limited	0	115442	115442
32	Five Network Solution (India) Ltd.	0	88998	88998
33	Ishan Netsol Pvt. Ltd.	0	81671	81671
34	Vortex Netsol Pvt. Ltd.	0	79206	79206
35	Fusionnet Web Services Pvt Ltd	0	74038	74038
36	EXTRANET SUPPORTS PRIVATE LIMITED erstwhile known as Dwan Supports Pvt. Ltd.	0	73879	73879

S.No.	Name of Service Provider	Narrowband	Broadband	Total
37	Microscan Infocommtech Private Limited	0	73799	73799
38	K Net Solutions Pvt. Ltd.	0	62453	62453
39	DEN Broadband Limited	0	59262	59262
40	Aerpace Communications Pvt Ltd	0	52807	52807
41	Radinet Info Solutions Pvt. Ltd.	0	45641	45641
42	Snet Networks Pvt. Ltd.	0	41483	41483
43	ADN Broadband Private Limited	0	40395	40395
44	DNA Infotel Pvt. Ltd.	0	40205	40205
45	Instanet Technologies Pvt. Ltd.	0	39238	39238
46	Meghbela Cable & Broadband Servies (P) Ltd	0	38364	38364
47	Gazon Communications India Limited	0	36309	36309
48	Multicraft Digital Technologies Private Limited	0	35284	35284
49	Nuron Networks India Private Limited	0	34541	34541
50	Readylink Internet Services Limited	0	34242	34242
51	WAVE FIBER PRIVATE LIMITED (Formerly Coastal Broadband and Online Services Pvt. Ltd.)	0	33368	33368
52	Ethernet Xpress(I) Pvt. Ltd.	0	33265	33265
53	IBUS VIRTUAL NETWORK SERVICES PRIVATE LIMITED	0	32165	32165
54	INFOCUS NETWORKS Pvt Ltd.	0	29153	29153
55	Sristisanchar Webnet Limited	0	29054	29054
56	Juweriyah Networks Pvt. Ltd.	0	27857	27857
57	Shree Omkar Infocomm Pvt Ltd	0	27375	27375
58	Digital Networks Associates Pvt. Ltd.	0	26044	26044
59	Tachyon Communications Private Limited	0	24711	24711
60	Tata Teleservices(Maharashtra) Ltd.	114	24597	24711
61	Deshkal Network Pvt. Ltd.	0	24085	24085
62	Spiderlink Networks Pvt. Ltd.	0	23474	23474
63	Navkar Supertech pvt Ltd	0	23360	23360
64	Shyam Spectra Private Limited	0	22123	22123
65	Airfiber Networks Pvt. Ltd.	0	22100	22100
66	Tata Teleservices Limited	26	22015	22041
67	Kings Broadband Pvt. Ltd	0	21823	21823
68	VORTEX INFOCOM PRIVATE LIMITED	0	21700	21700
69	Candor Infosolution Pvt. Ltd.	0	20792	20792
70	HYOSEC SOLUTIONS Pvt. Ltd.	0	20220	20220
71	Honeycomb Telnet Private Limited	0	19877	19877
72	Swiftmail Communications Ltd.	0	19619	19619
73	SIKKA BROADBAND PRIVATE LIMITED	0	19538	19538
74	D-ATUM Vilcom Private Limited	0	19478	19478
75	Genstar Network Solutions Pvt. Ltd.	0	19197	19197

S.No.	Name of Service Provider	Narrowband	Broadband	Total
76	Honesty Net Solutions (I) Pvt Ltd	0	18897	18897
77	Fibervalley Communications Pvt. Ltd.	0	17728	17728
78	QUEST CONSULTANCY PVT LTD	0	17288	17288
79	RI Networks Pvt Ltd	0	17239	17239
80	SRI SAI COMMUNICATION AND INTERNET PRIVATE LIMITED	0	16539	16539
81	Rajesh Digital & DataCom Pvt. Ltd.	0	15632	15632
82	Weebo Networks Pvt Ltd.	0	15467	15467
83	Yashash Cable Network (Pvt.) Ltd	0	15398	15398
84	Paradise Telecom Pvt. Ltd.	0	15149	15149
85	Five Internet Solutions Pvt. Ltd.	0	13965	13965
86	Pacenet Meghbela Broadband Pvt.Ltd.	0	13677	13677
87	Five Net Service Provider Pvt. Ltd.	0	13381	13381
88	City Online Services Ltd.	0	13031	13031
89	SDH Network Pvt. Ltd.	0	12790	12790
90	AT Broadband Pvt. Ltd.	0	12622	12622
91	WAN AND LAN INTERNET PRIVATE LIMITED	0	12525	12525
92	VIJAYALAKSHMI NET SERVICES PRIVATE LIMITED	0	12381	12381
93	Esto Broadband Pvt. Ltd.	0	12316	12316
94	DL GTPL Broadband Pvt. Ltd.	0	12041	12041
95	Apple Broadband Services Pvt. Ltd.	0	11488	11488
96	R.G. Technosolutions Pvt. Ltd.	0	11125	11125
97	Intermedia Cable Communication Pvt Ltd	0	10934	10934
98	Specific Net Pvt. Ltd	0	10914	10914
99	Net 9 Fibernet Pvt Ltd	0	10853	10853
100	Angel Air Network Solutions Pvt. Ltd.	0	10442	10442
101	Siliguri Internet & Cable TV Pvt. Ltd.	0	10358	10358
102	Tata Communications Limited	133	9891	10024
103	NORTH EAST DATAA NETWORK PRIVATE LIMITED	0	9900	9900
104	Rural Broadband Pvt. Ltd.	0	9831	9831
105	INFONET COMM ENTERPRISES PVT LTD	0	9662	9662
106	MAHA MEDIACOM INTERNET PVT. LTD.	0	9469	9469
107	Vainavi Industries Limited	0	9253	9253
108	FIBERX NETWORKS PRIVATE LIMITED (Erstwhile Known as Signum Digital Networks Pvt. Ltd)	0	9228	9228
109	APNA TELELINK PVT. LTD.	0	8550	8550
110	Orange Infocom PVT.LTD	0	8514	8514
111	FUTURE CONNECT BROADBAND Pvt Ltd.	0	8177	8177
112	Vizag Broad CastingCompany Pvt. Ltd.	0	7969	7969
113	Airconnect Internet Services Pvt. Ltd.	0	7847	7847

S.No.	Name of Service Provider	Narrowband	Broadband	Total
114	Multinet (Udaipur) Pvt. Ltd.	0	7807	7807
115	RAINBOW COMMUNICATIONS INDIA PRIVATE LIMITED	0	7729	7729
116	Cityzone Infonet Pvt. Ltd.	0	7690	7690
117	WSNS PVT. LTD.	0	7558	7558
118	Gigaline Teleservices (OPC) Pvt. Ltd	0	7336	7336
119	FOXTEL TELECOMMUNICATIONS PVT LTD	0	7325	7325
120	Sanfil Technologies Internet Services Pvt. Ltd.	0	7159	7159
121	Prisac Aviation Technologies Pvt. Ltd.	0	7071	7071
122	Kappa Internet Services Pvt. Ltd.	0	7024	7024
123	Lalat Internet Service Private Limited	0	7017	7017
124	Shine Communications Pvt. Ltd.	0	6951	6951
125	TJ BROADBAND NETWORK PVT LTD	0	6829	6829
126	United Telecoms Ltd.	0	6801	6801
127	SSCN Pvt. Ltd.	0	6720	6720
128	Patel Internet Pvt. Ltd.	0	6685	6685
129	Elxer Communications (P)Ltd.	0	6602	6602
130	ROHAN MEDIA PRIVATE LIMITED	0	6494	6494
131	Skymax Broadband Services Pvt. Ltd.	0	6442	6442
132	QUALITY BROADBAND PRIVATE LIMITED	0	6387	6387
133	S S Netcom Pvt. Ltd.	0	6354	6354
134	SANCHAR TELENETWORK PVT LTD	0	6345	6345
135	7 Star Cablenet Pvt. Ltd	0	6312	6312
136	ADN K NET FIBER PRIVATE LIMITED	0	6169	6169
137	Inet Fiber India Pvt. Ltd	0	6084	6084
138	LM Energy and Software Pvt. Ltd.	713	5322	6035
139	Dsouza Infotainment Pvt. Ltd.	0	6020	6020
140	DEEPNET BROADBAND PRIVATE LIMITED	0	6007	6007
141	Southern Online Bio Technologies Ltd.	0	5971	5971
142	SATELLITE NETCOM PRIVTAE LIMITED	5969	0	5969
143	NEXTGEN BROADBAND PRIVATE LIMITED	0	5898	5898
144	Vortex Infoway Private Limited	0	5830	5830
145	Symbios Creations Pvt. Ltd.	0	5711	5711
146	Sify Technologies Ltd.	249	5399	5648
147	OM-ASHA Net Pvt. Ltd.	0	5590	5590
148	Kerala Fibre Optic Network Limited	0	5552	5552
149	Praction Networks Private Limited	0	5520	5520
150	SFOUR CABLENET PVT LTD	0	5371	5371
151	Falconet Internet Pvt Ltd	0	5351	5351
152	Mangaluru Broadband Network Pvt Ltd	0	5300	5300
153	GEOCITY NETWORK SOLUTIONS PVT. LTD.	0	5205	5205

S.No.	Name of Service Provider	Narrowband	Broadband	Total
154	Wefe Technology Pvt. Ltd.	0	5203	5203
155	SNS Internet Services Pvt. Ltd.	0	5140	5140
156	Userlinks Netcom Pvt. Ltd.	0	4945	4945
157	SONALI INTERNET SERVICES PVT. LTD.	0	4877	4877
158	Siti vision Data Solutions Pvt Ltd	0	4850	4850
159	ARKTEL NETWORKS PVT LTD	0	4790	4790
160	HYFY Giga Fiber Pvt. Ltd.	0	4613	4613
161	HIGHTEC NETWORK SOLUTIONS (OPC) PRIVATE LIMITED	0	4552	4552
162	INRI COMMUNICATIONS PVT LTD	0	4493	4493
163	EM-CYBER SPACE SERVICES PVT LTD	0	4487	4487
164	HIGHTECH BROADBAND SERVICES PVT. LTD	0	4456	4456
165	NETRUN TECHNOLOGIES PVT LTD	0	4367	4367
166	Allnet Broadband Network Pvt Ltd	0	4353	4353
167	FIBRE AIR SERVICES Pvt Ltd.	0	4348	4348
168	Vibhuti Networks Pvt. Ltd.	0	4094	4094
169	Blazenet Ltd.	0	4017	4017
170	SUPER SONIC BROADBAND PVT LTD	0	3915	3915
171	Siddhant Broadband Pvt. Ltd.	0	3870	3870
172	SCNSKY DIGITAL OPC PRIVATE LIMITED	0	3840	3840
173	SoftCall Cust-O-Care Pvt. Ltd..	0	3699	3699
174	Kumar Cable Digital Network Pvt. Ltd.	0	3640	3640
175	NEHA INFONET PVT LTD.	0	3575	3575
176	STN INFOTECH PVT. LTD.	0	3544	3544
177	Getway Broadband Pvt. Ltd.	0	3496	3496
178	BHIMA RIDDHI BROADBAND PRIVATE LIMITED	0	3493	3493
179	Prathamesh Broadband Pvt. Ltd	0	3457	3457
180	Nirav Infoway Pvt. Ltd	0	3442	3442
181	Mukand Infotel Pvt. Ltd.	0	3335	3335
182	Net Access Internet India Private Limited	0	3311	3311
183	delDSL Internet Pvt Ltd	0	3287	3287
184	Krishinet Infocom Pvt. Ltd.	0	3225	3225
185	Sri Nagar Net Tech Pvt. Ltd.	0	3191	3191
186	Rainbow Internet teleservices Pvt Ltd	0	3184	3184
187	Maharaj Netsol Pvt Ltd	0	3136	3136
188	AS Broadband Pvt. Ltd	0	3118	3118
189	DREAMLINK TECHNOLOGIES PVT LTD	0	3107	3107
190	MicroNet Gigafiber Pvt Ltd	0	3025	3025
191	Netfox Networks Private Limited	0	2978	2978
192	Renu Giga Fiber Pvt. Ltd.	0	2904	2904
193	ajab media vision pvt. Ltd.	0	2900	2900

S.No.	Name of Service Provider	Narrowband	Broadband	Total
194	DEHRADUN E NET SOLUTIONS PRIVATE LIMITED	0	2881	2881
195	AAACLOUD TELEPHONY PRIVATE LIMITED	0	2822	2822
196	Netfirre Communications Pvt. Ltd.	0	2816	2816
197	Foxxcell Communications Pvt. Ltd.	0	2794	2794
198	Flashcom Network Pvt. Ltd.	0	2784	2784
199	Sherie Plexus ISP Pvt. Ltd.	0	2779	2779
200	NETVISION AWADH NETWORKS PVT LTD	0	2774	2774
201	NETWAY INTERNET PVT. LTD.	0	2753	2753
202	VRD Web Services Pvt. Ltd.	0	2723	2723
203	Kovai Fibernet Pvt. Ltd.	0	2718	2718
204	Antarjal IT Communication Pvt. Ltd.	0	2706	2706
205	Exnet Broadband Pvt. Ltd.	0	2670	2670
206	Niss Internet Services Pvt. Ltd.	0	2661	2661
207	TRANSMEDIA TECHNOLOGIES (AP) PVT LTD	0	2639	2639
208	ADRI INFOCOM Pvt. Ltd.	0	2559	2559
209	BHORER ALO CABLE AND BROADBAND PRIVATE LIMITED	0	2554	2554
210	Dishawaves Infonet Pvt. Ltd..	0	2538	2538
211	Myguru Online India (P)Ltd.	0	2514	2514
212	Deenet Services Pvt Ltd	0	2475	2475
213	Airgenie Communications Pvt. Ltd.	0	2460	2460
214	Gstech Software Systems Pvt Ltd	0	2456	2456
215	HBS Network Pvt. Ltd.	0	2455	2455
216	Chandra Net Pvt. Limited	0	2435	2435
217	Seven Star Digicom Pvt. Ltd..	0	2426	2426
218	Amar Broadband Pvt. Ltd..	0	2420	2420
219	NET4U SERVICES PVT. LTD.	0	2390	2390
220	SHILOM NETWORK SERVICES PRIVATE LIMITED	0	2371	2371
221	Karunay Internet Pvt. Ltd.	0	2366	2366
222	WOW Solutions and Systems Pvt. Ltd	0	2358	2358
223	Johnson Telemarketers Pvt. Ltd.	0	2355	2355
224	SBR Telecom Pvt. Ltd.	0	2350	2350
225	Real Wire Express Network Pvt. Ltd.	0	2341	2341
226	Fiberzone communication Pvt Ltd	0	2302	2302
227	Qwistel Network Service Pvt Ltd	0	2302	2302
228	OUTOFBOX NETWORKS PRIVATE LIMITED	0	2290	2290
229	SATHYA WEBSERVICES PRIVATE LIMITED	0	2277	2277
230	VENKATA SAI INTERNET PRIVATE LIMITED	0	2252	2252
231	North Point Services Pvt. Ltd.	0	2247	2247
232	SMART NET INDIA PVT LTD	0	2245	2245
233	Bakliwal Telecom Services Pvt. Ltd.	0	2236	2236

S.No.	Name of Service Provider	Narrowband	Broadband	Total
234	POWERNET TELECOM PVT LTD	0	2227	2227
235	Seashell Networking Pvt Ltd	0	2197	2197
236	A.S.C.S.C. DIGITAL PRIVATE LIMITED	0	2196	2196
237	GNANA 11 COMMUNICATION PVT LTD	0	2179	2179
238	Suntech Sanchar Private Limited	0	2123	2123
239	JDM Broadband Services Pvt. Ltd.	0	2095	2095
240	LAKSHAY ISOLUTIONS INDIA PRIVATE LIMITED	0	2077	2077
241	Jetspot Networks Pvt. Ltd.	0	2061	2061
242	Merv Enterprises Pvt Ltd	0	2055	2055
243	Vision Smartlink Networking Pvt. Ltd.	0	2048	2048
244	Classic Internet and Cable Services Pvt. Ltd.	0	2045	2045
245	KOLI'Z PRIVATE LIMITED	0	2044	2044
246	SMARTLINK SOLUTIONS PVT. LTD.	0	2033	2033
247	RSW Infoway Digital Solution Pvt Ltd	0	2005	2005
248	Shikhar BroadbandEnterprises Pvt. Ltd.	0	2000	2000
249	Pink Broadband Services Pvt. Ltd.	0	1990	1990
250	Tejays Dynamic Ltd.	27	1954	1981
251	TRICHY CHANNEL NINE CABLENET PRIVATE LIMITED	0	1977	1977
252	SSKY CONNEECT Pvt Ltd.	0	1965	1965
253	Aspirare Communications Pvt Ltd	0	1962	1962
254	Opticom Networks Pvt.Ltd	0	1961	1961
255	Megatel Networks Pvt. Ltd.	0	1951	1951
256	Southnet Broadband Pvt. Ltd.	0	1935	1935
257	IRISTEL Communication Private Limited (Erstwhile Known as Lotus Broadband Pvt. Ltd.)	0	1928	1928
258	CORREL IT SERVICE PVT LTD	0	1920	1920
259	BLITS GLOBAL TECHNOLOGIES Pvt. LTD	0	1894	1894
260	Scud Communication Pvt. Ltd.	0	1867	1867
261	First Mile Digital Private Limited	0	1860	1860
262	World Fibernet Private Ltd	0	1850	1850
263	D Nex technology Pvt. Ltd.	0	1846	1846
264	Skyline Infonet Pvt. Ltd.	0	1821	1821
265	Bakcom Networks India Pvt. Ltd.	0	1819	1819
266	Sanchit Infocom Pvt Ltd	0	1818	1818
267	F2H Networks Pvt. Ltd.	0	1806	1806
268	MORE WIFI INTERNET PRIVATE LIMITED	0	1805	1805
269	VPM NETWORKS PRIVATE LIMITED	1801	0	1801
270	Maulee Broadband Private limited	0	1793	1793
271	Starlings Wireless Communications Pvt. Ltd.	0	1780	1780
272	Lbs Infoway India Pvt. Ltd.	0	1762	1762

S.No.	Name of Service Provider	Narrowband	Broadband	Total
273	psnet solutions pvt ltd	0	1745	1745
274	DNS SKYLINK PVT. LTD.	0	1728	1728
275	Wizbyte Networks Private Limited	60	1664	1724
276	JB Jain Broadband Solutions Private Limited	0	1711	1711
277	Assistive networks & technologie Pvt Ltd	0	1701	1701
278	Syntego Technologies India Pvt. Ltd.	0	1694	1694
279	City Online AP Pvt. Ltd.	0	1693	1693
280	Protoact Digital Network Pvt. Ltd.	0	1683	1683
281	Galaxynet Connections Pvt. Ltd.	0	1676	1676
282	GRAND BROADBAND SERVICES PRIVATE LIMITED	0	1658	1658
283	ALACRIY NET SYSTEM SERVICE PRIVATE LIMITED	0	1657	1657
284	Osbnnet Broadband Pvt. Ltd.	0	1653	1653
285	KARAD-D-INFRA GIGA NET PRIVATE LIMITED	0	1643	1643
286	INFINET BROADBAND PRIVATE LIMITED	0	1634	1634
287	Sefaro Networks Pvt. Ltd.	0	1629	1629
288	Sadaa SmartlinksCommunication Pvt. Ltd.	0	1621	1621
289	UK GIGAFIBER INTERNET SERVICES PRIVATE LIMITED	0	1615	1615
290	AMK SUNBEAM COMMUNICATION PRIVATE LIMITED	0	1611	1611
291	Jiffy Cable & Datacom Pvt. Ltd.	0	1611	1611
292	MOVEX DIGITAL TECHNOLOGY PVT LTD	0	1610	1610
293	Jeebr Internet Service Private Limited	0	1606	1606
294	Spectram Telecom Pvt.Ltd	0	1604	1604
295	Susneham Private Limited	0	1599	1599
296	S P Internet Technologies Pvt. Ltd.	0	1592	1592
297	KWIKZO TELECOMM Pvt. LTD	0	1582	1582
298	Charotar Telelink Pvt. Ltd..	0	1578	1578
299	Megahertz Internet Network Pvt. Ltd.	0	1577	1577
300	VAYU ONLINE PRIVATE LIMITED	0	1577	1577
301	Onet Digital Networks Pvt. Ltd..	0	1574	1574
302	Sphier Infotech PVT. LTD.	0	1564	1564
303	Teligus Networks Pvt. Ltd	0	1563	1563
304	COMPLIANCE BROADBAND PRIVATE LIMITED	14	1537	1551
305	F/X Wireless Technology Services Pvt. Ltd.	0	1550	1550
306	Thrishul Broadband Pvt. Ltd..	0	1550	1550
307	Skynet Datacom Pvt. Ltd.	0	1547	1547
308	Mana Broadband Pvt. Ltd.	0	1544	1544
309	B2H Infonet Pvt. Ltd.	0	1534	1534
310	Capture Network Systems Pvt. Ltd.	0	1517	1517

S.No.	Name of Service Provider	Narrowband	Broadband	Total
311	Speednet Unique Network Pvt. Ltd.	0	1506	1506
312	Ski Network Services Pvt. Ltd	0	1488	1488
313	Mayekar Broadband Pvt. Ltd.	0	1476	1476
314	Channel III Internet Pvt. Ltd.	0	1462	1462
315	ERO WIDE COMM Pvt. Ltd.	0	1461	1461
316	NGC Broadband Pvt. Ltd.	0	1444	1444
317	F2Connect Private Limited	0	1435	1435
318	S S Fiber Net OpticalCommunication Pvt. Ltd.	0	1430	1430
319	MGI NETWORKS PVT LTD	0	1418	1418
320	Speedmaxx Digital Networks Pvt. Ltd.	0	1412	1412
321	Country Online Services Pvt. Ltd.	0	1408	1408
322	INET SEVICES PVT LTD	0	1407	1407
323	INTERJET INDIA PRIVATE LIMITED	0	1400	1400
324	SIS NETWORKS PVT LTD	0	1382	1382
325	Elyzium Technologies Pvt. Ltd.	0	1380	1380
326	Smart Wi5 Pvt. Ltd.	0	1372	1372
327	Sundaram Broadband Pvt Ltd	0	1358	1358
328	Blu Ultraband Internet Services Private Limited	0	1354	1354
329	Space Hitz Network Pvt Ltd	0	1343	1343
330	Sigaram Networks Pvt. Ltd.	0	1340	1340
331	GREEN ARROW TECHNOLOGY PRIVATE LIMITED	0	1336	1336
332	Corsica Solutions Private Limited	0	1334	1334
333	Minnal DigitalNetwork (P) Ltd.	0	1327	1327
334	Unitel Media Pvt. Ltd.	0	1320	1320
335	Mauli Shiv Cable Internet Services Private Limited	0	1319	1319
336	Packenet Solutions Pvt. Ltd.	0	1315	1315
337	R2 Net Solutions Pvt. Ltd.	0	1304	1304
338	CARE BROADBAND PRIVATE LIMITED	0	1303	1303
339	DHL Broadband Net Pvt. Ltd.	0	1288	1288
340	Stackbit Internet Services Pvt. Ltd.	0	1286	1286
341	Peak Air Pvt. Ltd.	0	1284	1284
342	Vizag BroadbandCommunications Pvt. Ltd.	0	1284	1284
343	Unigro Infranet Online Pvt. Ltd.	1274	0	1274
344	Cyber City ExtremeBroadband Pvt. Ltd.	0	1270	1270
345	Oxynet Telecommunications Pvt. Ltd	0	1262	1262
346	Airwaves Internet Pvt. Ltd.	0	1255	1255
347	Venessa Internet Pvt. Ltd.	0	1254	1254
348	VSJ INTERNET SERVICES PVT. LTD.	0	1254	1254
349	Maury Broadband Marketing Private Limited	0	1252	1252
350	Gigacast Network Pvt. Ltd.	0	1249	1249
351	City Broadband Network Pvt Ltd	0	1248	1248

S.No.	Name of Service Provider	Narrowband	Broadband	Total
352	MAKS COMMUNICATIONS PVT.LTD.	0	1248	1248
353	Mhase Internet Network (OPC) Pvt. Ltd.	0	1241	1241
354	Nikita Broadband Pvt. Ltd	0	1240	1240
355	Uzaina Business India Pvt. Ltd.	0	1240	1240
356	TECHNETSOL INFOTECH PRIVATE LIMITED	0	1235	1235
357	UNITED STARS NETWORK PRIVATE LIMITED	0	1221	1221
358	AIRWIR TECHNOLOGIES PVT LTD	0	1220	1220
359	ARCLINK NETWORK Pvt Ltd.	0	1209	1209
360	Veloxr Telecom Pvt. Ltd.	0	1207	1207
361	Grace Teleinfra Pvt Ltd	0	1200	1200
362	Treelink Broadband Pvt. Ltd.	0	1200	1200
363	Sharplink Wireless Solution Pvt. Ltd.	0	1194	1194
364	Shrisai Shavenk Technologies Pvt. Ltd.	0	1194	1194
365	Poem Techno Pvt. Ltd.	0	1186	1186
366	Dreamnet Gigafiber Pvt Ltd	0	1183	1183
367	FTTX Broadband P Ltd	0	1180	1180
368	MAHRTH INTERNET SERVICES PRIVATE LIMITED	1178	0	1178
369	REVOLUTION BROADBAND PVT LTD	0	1177	1177
370	Navkar Netsol Pvt. Ltd..	0	1158	1158
371	EBENEZAR COMMUNICATIONS PVT. LTD.	0	1156	1156
372	SkyComm Internet Service Private Limited	0	1151	1151
373	CONNECT4SURE TECHNOLOGIES PRIVATE LIMITED	0	1148	1148
374	Global (India) Tele Infra Pvt. Ltd.	0	1148	1148
375	SHAILDHAR TELECOM SERVICES Pvt. LTD	0	1143	1143
376	Sampath Venkateswara Communications Pvt. Ltd.	0	1133	1133
377	In Broadband Pvt.ltd	0	1121	1121
378	Green Tech Net Com Pvt. Ltd.	0	1118	1118
379	DNS INFONET Pvt Ltd	0	1113	1113
380	ACN Fiber Pvt. Ltd.	0	1100	1100
381	Suniman Cable and Net Pvt Ltd	0	1090	1090
382	CITY TRANSMISSION NETWORK PRIVATE LIMITED	1073	0	1073
383	Hardwork Cable & Internet services Pvt. Ltd.	0	1072	1072
384	DIGHES INTERNET SERVICES OPC PRIVATE LIMITED	0	1056	1056
385	MARUTHI INTERNET PRIVATE LIMITED	0	1056	1056
386	KKD Broadband Pvt Ltd	0	1053	1053
387	Elitel Solutions Private Limited	0	1048	1048
388	Trueinet Networks Pvt.Ltd	0	1036	1036
389	CATLA IT&ENGG. CO. PVT LTD.	0	1030	1030

S.No.	Name of Service Provider	Narrowband	Broadband	Total
390	Hostaxis Network Pvt. Ltd.	0	1024	1024
391	Asg Telecom Pvt. Ltd	0	1016	1016
392	Netlinx Limited	0	1016	1016
393	SKY ONLINE TECHNOSYSTEM PVT LTD	0	1016	1016
394	FASTNET COMMUNICATION PVT. LTD.	1014	0	1014
395	Rtel Internet services Pvt Ltd	0	1005	1005
396	Varsha Datacom Services Pvt. Ltd.	0	988	988
397	AKD NETWORK PRIVATE LIMTED	0	980	980
398	GPS Connection Private Limited	0	972	972
399	Al-Mairah Braodband Pvt. Ltd.	0	971	971
400	AHM Digital Network Pvt Ltd	0	970	970
401	Netfirst Communications Pvt. Ltd.	0	969	969
402	FIBERSTORY COMMUNICATIONS PRIVATE LIMITED (erstwhile SHENG LI TELECOM INDIA PRIVATE LIMITED)	0	968	968
403	Click 4 Net InternetServices Pvt. Ltd.	0	962	962
404	Ashley Internet Services Pvt. Ltd.	0	959	959
405	Macro Signal Pvt. Ltd	0	958	958
406	M Netplus Communication Services Pvt Ltd	0	946	946
407	Anushree Digital Network Pvt Ltd	0	944	944
408	Surround Networks Pvt Ltd	0	943	943
409	NetMagic Solutions(P) Ltd.	0	927	927
410	ARJUN BROADBAND PRIVATE LIMITED	0	924	924
411	Seyon Tele Infra Private Limited	0	920	920
412	Sarvada net Pvt. Ltd	0	918	918
413	JCN INTERNET PVT LTD	0	916	916
414	Lakecity Intercom Private Limited	0	915	915
415	ALWAR ONLINE PVT LTD	0	910	910
416	Darer Internet Services Pvt. Ltd.	0	909	909
417	IAXN TELECOM PVT LTD	0	909	909
418	Wyris Network Pvt. Ltd.	0	908	908
419	WANSH INTECH SERVICES HUB PRIVATE LIMITED	0	904	904
420	Briskcom Infoway Pvt. Ltd.	0	902	902
421	Glo Internet Services Pvt Ltd	0	901	901
422	Gulbarga Mega Speed Pvt Ltd	0	900	900
423	OM SHIV SAI INTERNET SERVICE (OPC) PVT. LTD	0	900	900
424	RADHIKA COMMUNICATION BROADBANDPRIVATE LIMITED	0	898	898
425	Spider Broadband Pvt. Ltd..	0	898	898
426	Shri Samarth Infobahn Pvt. Ltd.	893	0	893
427	DA Smartzone Pvt. Ltd.	0	891	891

S.No.	Name of Service Provider	Narrowband	Broadband	Total
428	Spider Broadband & Cable Pvt. Ltd.	0	888	888
429	BTS TELECOM PVT LTD	0	887	887
430	SRI KRISHNA INTERNET SERVICE PVT LTD	0	882	882
431	ZENNET SERVICES PRIVATE LIMITED	0	875	875
432	Ficus Telecom Pvt. Ltd.	0	873	873
433	MIT ONLINE OPC Pvt Ltd	0	873	873
434	M/s NTT Communications India Network Services Private Ltd.	0	866	866
435	Sai Dwarawati Net Services Pvt. Ltd.	0	860	860
436	NETSAT COMMUNICATIONS PVT. LTD.	0	858	858
437	Mhatoba BroadbandPvt. Ltd	0	852	852
438	AU NetworksPvt. Ltd.	0	851	851
439	Balaji Infra Ray Pvt. Ltd.	0	850	850
440	Skyber Broadband Service Pvt. Ltd	0	850	850
441	Meerut Internet Services Pvt. Ltd.	835	0	835
442	Clickian Network Pvt. Ltd.	0	832	832
443	Primenet Global Private Limited (erstwhile known as Primenet Global Ltd.)	0	826	826
444	Gleam Worldwide Services Pvt. Ltd.	0	825	825
445	PRIYANK INFOMATICS (OPC) PRIVATE LIMITED	0	821	821
446	VICTORY DIGITAL NETWORK PRIVATE LIMITED	0	821	821
447	Ultimate Internet Services Pvt. Ltd.	0	814	814
448	Rathnaa Spectra Pvt. Ltd.	0	813	813
449	SRI NETT PRIVATE LIMITED	0	813	813
450	Sharva Telenet Private Limited	0	812	812
451	Sivaan Infocom Pvt. Ltd	0	807	807
452	IQTERA COMMUNICATION PVT LTD	0	803	803
453	HPS DIGITAL BROADBAND PVT LTD	795	0	795
454	Nettab Broadband Pvt Ltd	0	794	794
455	KESHAVA DIGITAL NETWORK PVT. LTD.	0	793	793
456	RK Broadband Hifi Services Pvt Ltd	793	0	793
457	SVD Digital Networks Pvt. Ltd.	0	793	793
458	Telosy Telecom Pvt. Ltd.	0	791	791
459	Vinayaga Communications Pvt Ltd.	0	785	785
460	Excel UG Pvt. Ltd	0	780	780
461	Moradabad Internet Services Pvt. Ltd.	0	780	780
462	RAGAI NETWORK PRIVATE LIMITED	0	779	779
463	Graceway Infrastructure and Services Pvt. Ltd	0	777	777
464	SRI BALAJI INTERNET PVT LTD	0	770	770
465	Suraj Networks Pvt. Ltd.	0	770	770
466	Bapu Internet ServicesPvt. Ltd.	0	768	768

S.No.	Name of Service Provider	Narrowband	Broadband	Total
467	Alegra Communication Pvt Ltd	0	763	763
468	Datawave IT solutions Pvt. Ltd.	0	763	763
469	DURONTO NETWORKS (OPC) PRIVATE LIMITED	0	761	761
470	Reliance Communications Limited	760	0	760
471	GOAN FIBERNET INDIA PRIVATE LIMITED	0	757	757
472	Touchnet Broadband Services Pvt. Ltd.	0	757	757
473	Rida Communication Pvt. Ltd.	0	751	751
474	SNDC COMMUNICATION PRIVATE LIMITED	0	749	749
475	Shineplus Networks Pvt. Ltd.	0	741	741
476	INFOLINK BROADBAND SERVICES PRIVATE LIMITED	0	739	739
477	SG Broadband Internet Pvt. Ltd.	0	736	736
478	FASTCOM TELELINK PRTVATE LIMITED	0	734	734
479	GVREDDY TELECOMMUNICATIONS (OPC) PVT LTD	0	731	731
480	Bluwaves Internet Services India Pvt. Ltd.	0	729	729
481	Shass Information and Quality Engineering Services Pvt. Ltd.	0	728	728
482	PJR NET SERVICE PRIVATE LIMITED	0	725	725
483	Power Grid Corporation of India Ltd.	0	723	723
484	Spirenet Digital Communications Pvt. Ltd.	0	720	720
485	MAXNET DIGITAL PRIVATE LIMITED	0	714	714
486	Mahabal Net Service Provider	0	710	710
487	Cloudnet Communications Pvt. Ltd.	0	706	706
488	Software Technology Parks of India	9	697	706
489	OUTRAGEOUS NETSOLE PRIVATE LIMITED	700	0	700
490	SAI DWARAWATI NET SERVICES PVT. LTD.	0	700	700
491	Vimal Telecom Pvt. Ltd	0	694	694
492	R.P.TECH-ZONE PRIVATE LIMITED	0	693	693
493	GAURESH CABLENET SERVICES PRIVATE LIMITED	0	692	692
494	HINDAVI TELECOM PRIVATE LIMITED	0	689	689
495	Gloiosa Infotel IT Services Pvt Ltd.	0	682	682
496	Spark Telecommunication Private Limited	0	679	679
497	Kosmic Broadband Pvt Ltd	0	675	675
498	TOUCH NET INDIATELESERVICES PRIVATE LIMITED	0	673	673
499	N4U broadband pvt.ltd	0	670	670
500	C. J. Online Pvt. Ltd.	0	669	669
501	HANSA BROADBAND SERVICES PRIVATE LIMITED	0	666	666
502	Uttam Infranet Pvt. Ltd..	0	662	662
503	BASS NETWORKS PRIVATE LIMITED	0	661	661
504	INCUBIX UNIFIED SOLUTIONS PRIVATE LIMITED	0	659	659

S.No.	Name of Service Provider	Narrowband	Broadband	Total
505	HDM BROADBAND PRIVATE LIMITED	0	655	655
506	Development Logics Solutions Pvt. Ltd.	0	650	650
507	CAB-NET SERVICES PRIVATE LIMITED	0	648	648
508	PARAMOUNT INFINET PVT. LTD.	0	643	643
509	ACME Diginet Corporation Pvt. Ltd.	0	634	634
510	Goodwill Smartlink Pvt. Ltd.	0	633	633
511	B R MHATRE PRIVATE LIMITED	0	631	631
512	BENVAR PRIVATE LIMITED	0	631	631
513	Blue Net IT Solutions Pvt. Ltd.	0	631	631
514	Bass Jokernet Pvt. Ltd.	0	630	630
515	Nandini Broadband Pvt. Ltd.	0	624	624
516	YES BROADBANDPRIVATE LIMITED	0	624	624
517	FASTJET TELECOM PRIVATE LIMITED	0	622	622
518	Airnetz Broadband Services Pvt. Ltd.	0	613	613
519	Ometa Net Pvt. Ltd.	0	612	612
520	Datamax Technologies Pvt Ltd	0	611	611
521	Rajesh Patel Net Services Pvt. Ltd.	0	611	611
522	Airway Communication Services India Pvt. Ltd.	0	608	608
523	RNET GIGAFIBER Pvt. LTD	608	0	608
524	SERANS FIBERNET PRIVATE LIMITED	0	608	608
525	Windsor Internet Pvt. Ltd.	0	608	608
526	Nextra Communications Private Limited	0	606	606
527	CLOUDPATH TELECOM PVT LTD	0	604	604
528	ALLIED IT INFRASTRUCTURE & SERVICES PRIVATE LIMITED	603	0	603
529	Easy Solutions InternetServices Pvt. Ltd.	0	600	600
530	NC BROADBAND SERVICES PRIVATE LIMITED	0	599	599
531	RSBS Online Services Pvt. Ltd.	0	595	595
532	LIMERICK TECHNOLOGIES PRIVATE LIMITED	0	590	590
533	Clicknet Communication Pvt. Ltd.	589	0	589
534	Gowio Networks Pvt. Ltd	0	588	588
535	Aeroway Networks Pvt. Ltd.	0	581	581
536	R.P World Webnet Pvt.Ltd.	0	579	579
537	BHR BROADBAND Pvt. LTD	0	577	577
538	Bandwidth Infinity Pvt. Ltd	0	576	576
539	VASANSHAH NETWORK PRIVATE LIMITED	0	576	576
540	Alphanet Broadband Pvt Ltd	0	571	571
541	RAAGAV COMMUNICATIONS PVT LTD	0	565	565
542	SprIOC Web Private Limited	0	563	563
543	Nanjil Internet Services Pvt. Ltd.	0	560	560
544	Kad-Syscon NetworksPvt. Ltd	0	559	559

S.No.	Name of Service Provider	Narrowband	Broadband	Total
545	Daksh Broadband Services Pvt. Ltd.	0	557	557
546	Gazillio Technologies Pvt. Ltd.	0	557	557
547	Blazing SpeedBroadband Pvt. Ltd.	0	550	550
548	Prayag BroadbandPvt. Ltd.	0	550	550
549	Digital2Virtual ISP Pvt. Ltd.	0	549	549
550	Panav Network and Communications Private Limited	0	548	548
551	PRATIK NETWORKING SOLUTIONS PRIVATE LIMITED	0	547	547
552	Tanvi Broadband Pvt Ltd	0	547	547
553	GIGANET DIGITAL NET SERVICES PRIVATE LIMITED	0	546	546
554	MSINFINITY ETHERNET SOLUTIONS PRIVATE LIMITED	544	0	544
555	Fastnet Wire & Wireless Solutions Pvt. Ltd.	0	543	543
556	FIBER POWER CONNECTS PRIVATE LIMITED	0	540	540
557	SARVA AIRWORLD NETWORK PVT LTD	0	533	533
558	7 Sai Net Solutions Pvt. Ltd.	0	532	532
559	NETARC SOLUTIONS PRIVATE LIMITED	0	531	531
560	Singh Televentures Pvt Ltd	0	530	530
561	Malang Solutions Pvt. Ltd.	0	527	527
562	AL HUTAIB NETSOL PRIVATE LIMITED	0	521	521
563	Sparklink. Net Pvt. Ltd.	0	520	520
564	Unborn Networks Pvt. Ltd.	0	520	520
565	WIND STREAM NETWORK PRIVATE LIMITED	0	516	516
566	Manish Infocom Pvt. Ltd.	0	511	511
567	DE-CIX Interwire Internet Services Pvt. Limited	0	509	509
568	Feathers wireless network (opc) Pvt. Ltd.	0	509	509
569	G B Internet Service Private Limited	0	501	501
570	Smart Choice Wireless Network Pvt. Ltd.	501	0	501
571	RACSANN TECHNOLOGIES PVT. LTD.	0	500	500
572	AT&T Global Network Service India Private Limited	0	499	499
573	Royal Connect Solutions Pvt. Ltd	0	499	499
574	Cityline Networks Pvt Ltd	0	496	496
575	Reticule Infotech Pvt. Ltd.	0	496	496
576	NEONET COMMUNICATIONS PVT. LTD.	0	493	493
577	Spiretel Technologies Pvt Ltd	0	492	492
578	CNS Infotel Services Pvt. Ltd..	0	491	491
579	DV INFOCOM PRIVATE LIMITED	0	490	490
580	JMD INTERNET AND SERVICES PVT. LTD.	0	490	490
581	KOSHI BROADBAND COMMUNICATIONS (OPC) PVT LTD	0	487	487
582	Mall and Mall Digiworld Pvt. Ltd.	0	487	487

S.No.	Name of Service Provider	Narrowband	Broadband	Total
583	APPCALL INTERNET SERVICES PRIVATE LIMITED	0	485	485
584	Dhanam Internet Services India Pvt. Ltd.	0	479	479
585	Earthlink Broadband Pvt. Ltd	0	479	479
586	Monark Broadband Private Limited	0	478	478
587	Shree Manoranjan Broadband Pvt. Ltd.	0	477	477
588	ULTRAVISION INFOSERVE PVT LTD	0	476	476
589	Texes Connect Private Limited	0	475	475
590	Unisas Netserve Pvt. Ltd.	0	472	472
591	Wavetree Networks Pvt. Ltd.	0	471	471
592	SYNCFAC TO CONSULTING Pvt Ltd.	0	465	465
593	SANSOM NETTECH PRIVATE LIMITED	0	462	462
594	CONSAM TELECOM PRIVATE LIMITED	0	461	461
595	Gaba Associates internet service provider pvt ltd.	0	461	461
596	WEBNET BROADBAND (OPC) PRIVATE LIMITED	0	461	461
597	OPTO Communications Private Limited	0	456	456
598	OM INTERNET BROADBAND SERVICE Pvt. LTD	455	0	455
599	Ishani Broadband Pvt Ltd	0	453	453
600	GTECH COMMUNICATION Pvt Ltd	0	451	451
601	MANA INTERNET SERVICES PRIVATE LIMITED	0	451	451
602	Sistemas Information Technology Pvt. Ltd.	0	451	451
603	Acegen Broadband Pvt. Ltd.	0	448	448
604	Suncity Broadband Pvt. Ltd.	0	448	448
605	Quick Link Broadband and Services Pvt. Ltd.	0	447	447
606	Aeronet online services private limited	0	443	443
607	KKM Broadband Internet Pvt. Ltd.	0	443	443
608	Gorkha Infotech Private Limited	0	442	442
609	MREZHI INTERNET PRIVATE LIMITED	0	440	440
610	BSL Technologies Pvt. Ltd.	0	438	438
611	Daan Communications Private Limited	0	438	438
612	BPS COMMUNICATION AND SERVICES PRIVATE LIMITED	0	435	435
613	LINK 4 DATA COMMUNICATION PVT LTD	0	432	432
614	Wireline Solution India Pvt Ltd	0	432	432
615	Prompt Infracom Pvt. Ltd.	0	430	430
616	SPARKLIGHT INTERNET PRIVATE LIMITED	0	430	430
617	Alien DNS Pvt. Ltd.	0	426	426
618	Kataria Net Solutions Pvt. Ltd.	0	420	420
619	DMDS SOLUTIONSPRIVATE LIMITED	0	417	417
620	Sysnet Broadband Services Pvt. Ltd.	0	417	417
621	SAI KUMAR INFONET PRIVATE LIMITED	0	415	415
622	TRACKNET SERVICES PVT LTD	0	413	413

S.No.	Name of Service Provider	Narrowband	Broadband	Total
623	KSK Broadband Pvt. Ltd.	0	410	410
624	Gera Cable Internet Service Pvt. Ltd.	0	408	408
625	RUSH ME BROADBAND PRIVATE LIMITED	0	403	403
626	SIDDIQUI GLOBAL SERVICES PVT LTD	0	403	403
627	FASUTONETTO SERVICES PRIVATE LIMITED	0	400	400
628	SmchondheCommunication Pvt. Ltd	0	400	400
629	HANUMAT NETWORKS PRIVATE LIMITED	0	397	397
630	Visputes Internet Pvt. Ltd.	0	395	395
631	airtechzone services india private limited	0	393	393
632	TECHNOMEX INFOCOM SYSTEMS PVT LTD.	0	392	392
633	Linkway Internet Pvt.Ltd.	0	391	391
634	VDCN INFOTECH PRIVATE LIMITED	0	390	390
635	SAPTRANET INDIA PVT LTD	0	383	383
636	Airlink Communications Pvt. Ltd.	0	382	382
637	VORRUCKEN NETWORKS PRIVATE LIMITED	0	382	382
638	VIBELINK INFOTECH PRIVATE LIMITED	0	381	381
639	Skylink Fibernet Pvt. Ltd.	0	380	380
640	Terrafiber Networks Pvt. Ltd.	0	380	380
641	Cybernet Introtech Pvt. Ltd.	0	375	375
642	VIVEK NETWORK PRIVATE LIMITED	0	374	374
643	NETZI BROADBAND SERVICES PVT LTD	373	0	373
644	Imperium Digital Network Pvt. Ltd.	0	370	370
645	Starnet Global Pvt. Ltd.	0	370	370
646	Rocketwire Internet Solutions Pvt. Ltd.	0	365	365
647	DMP Internet ServicesPvt. Ltd	0	361	361
648	Honey Broadband Services Pvt. Ltd.	0	354	354
649	3J Global Services Pvt Ltd	0	353	353
650	JD Net Enterprises Pvt. Ltd	0	353	353
651	PRO MULTILINK SERVICE (OPC) PRIVATE LIMITED	0	351	351
652	WAY2NET IT SERVICES PVT LTD	0	350	350
653	Nandita Infocom Pvt. Ltd.	0	347	347
654	Sense Connect IT Pvt. Ltd.	0	347	347
655	Hipoint Connect Pvt. Ltd.	0	345	345
656	PULSE TELESYSTEMS PRIVATE LIMITED	0	344	344
657	Frontier Infra Communications(P) Ltd.	0	338	338
658	VERYS INFOTECH PRIVATE LIMITED	0	335	335
659	PRONET PRIVATE LIMITED	0	334	334
660	Sai Akshay Internet Services Pvt Ltd.	0	332	332
661	Yuva Communications Private Limited	0	332	332
662	Twincity Communication Private Limited	0	328	328
663	I-Infolink Networks Pvt. Ltd.	0	327	327

S.No.	Name of Service Provider	Narrowband	Broadband	Total
664	AiriconCommunication Pvt. Ltd	0	325	325
665	Excogitate Technologies Pvt. Ltd.	0	325	325
666	R N Broadband Online Pvt. Ltd	0	325	325
667	VN ETHERNET INDIA PRIVATE LIMITED	325	0	325
668	Zoram Infonet Pvt. Ltd.	0	320	320
669	Proline Datatech Services Pvt. Ltd.	0	319	319
670	Citylink Broadband Services Pvt. Ltd.	0	318	318
671	Ncore Creative Technologies Pvt. Ltd	0	318	318
672	METREXA BROADNET PRIVATE LIMITED	0	317	317
673	Runet infotech India pvt ltd	0	314	314
674	Bittel Telecom Private Limited	0	312	312
675	Bluenet Broadband Services Pvt. Ltd.	0	310	310
676	GPALV BROADBAND PRIVATE LIMITED	0	310	310
677	AARADHY LIAISON SERVICES PRIVATE LIMITED	0	309	309
678	Barani Data Solutions Private Limited	307	0	307
679	Gramin Broadband Network Pvt. Ltd.	0	307	307
680	FLITZEN BROADBAND Pvt Ltd.	0	305	305
681	Srushti Broadband And Internet Services Pvt. Ltd.	0	304	304
682	TRIVNET NETWORKS PRIVATE LIMITED	0	304	304
683	Verizon Communications India Pvt. Ltd.	0	304	304
684	Voxterria Innovtions Pvt. Ltd.	0	304	304
685	Inter Net LY Pvt. Ltd.	0	302	302
686	O V NETWORKS PVT LTD	0	302	302
687	Hyber Networking Pvt. Ltd.	0	301	301
688	Apex Netcom India Pvt. Ltd..	0	300	300
689	Simplex Broadband Pvt. Ltd.	0	299	299
690	SSICON SYSTEMS PRIVATE LIMITED	0	297	297
691	SBS BROADBAND AND CABLE PVT. LTD.	0	296	296
692	Skyhunt IT Park Pvt. Ltd.	0	290	290
693	SMARTLINK BROADBAND SERVICES PVT LTD	0	286	286
694	Sreedevi Communications Private Limited	0	281	281
695	INYCB Network Pvt. Ltd.	0	279	279
696	Onepipe Telecom Pvt. Ltd	0	279	279
697	BLESS NETWORK PRIVATE LIMITED	277	0	277
698	HDN COMMUNICATIONS PRIVATE LIMITED	0	276	276
699	LINKUNIVERSE COMMUNICATION PRIVATE LIMITED	0	276	276
700	TRIGART INTERNET PVT. LTD.	0	276	276
701	SWANAND INTERNET SERVICES PRIVATE LIMITED	0	271	271
702	J-Link Infotainment Pvt. Ltd.	0	270	270

S.No.	Name of Service Provider	Narrowband	Broadband	Total
703	Digital Telco Network India Pvt. Ltd.	0	269	269
704	NAKODA NETWORK PRIVATE LIMITED	0	267	267
705	LINKSPEED TELEINFRA PRIVATE LIMITED	0	262	262
706	EYE FASTNET SERVICE PRIVATE LIMITED	0	261	261
707	SIDDHBALI INFOTECH PVT LTD.	0	260	260
708	Singh Internet Services Pvt. Ltd.	0	260	260
709	Vizcon Digital Pvt. Ltd.	260	0	260
710	BBRG Communication and Internet Pvt. Ltd.	0	258	258
711	Roarnet Broadband Pvt Ltd	0	258	258
712	Devdarpan Broadband Pvt Ltd	256	0	256
713	Ruhban Telecommunication Private Limited	0	254	254
714	Elecon Information Technology Ltd.	0	253	253
715	TEJNET GIGAFIBER PRIVATE LIMITED	0	253	253
716	LINKWAVE TECHNOLOGIES PVT LTD	0	252	252
717	AIRONET BROADBAND PRIVATE LIMITED	0	250	250
718	CHANNEL 3 INFO MEDIA PRIVATE LIMITED	0	250	250
719	Linkio Fibernet Private Limited	0	250	250
720	SPEEDGLOBAL TELECOM NETWORK PRIVATE LIMITED	0	250	250
721	SWAMIVATVRUKSHA NET (OPC) PVT LTD	0	250	250
722	Nivak Communications Pvt. Ltd	0	249	249
723	King Netsol Pvt. Ltd.	27	221	248
724	PRSHREE Networks Private Limited	0	248	248
725	SNT Broadband Pvt. Ltd.	0	248	248
726	GIGA BEAM BROADBAND PVT.LTD.	0	247	247
727	KALYAN BROADBAND PRIVATE LIMITED	0	246	246
728	MRRIDSYS TECHNOLOGIES PVT LTD	0	245	245
729	SRI RAM BROADBAND SERVICES PRIVATE LIMITED	0	244	244
730	Breitband Technologies Private Limited	0	243	243
731	HAWK NETWORKS	0	241	241
732	AEROLINK BROADBAND PRIVATE LIMITED	0	238	238
733	Microsense Pvt Ltd	0	237	237
734	Netrexo Communications Private Limited	0	237	237
735	JTM Internet Pvt. Ltd	0	236	236
736	LEROY NETWORKS AND SERVICES PRIVATE LIMITED	0	236	236
737	ABNSERVICES PVT LTD	0	235	235
738	STN Communication & Advertising Pvt. Ltd.	0	235	235
739	LAYA NETWORK PRIVATE LIMITED	0	233	233
740	MANAS INTERNET TECHNOLOGY PRIVATE LIMITED	0	230	230

S.No.	Name of Service Provider	Narrowband	Broadband	Total
741	Pegasuswave Private Limited	0	230	230
742	FoFo Networks Private Limited	0	229	229
743	Ecreado Network Solutions Pvt. Ltd.	0	228	228
744	Hipath Netcom Services Pvt. Ltd.	0	228	228
745	Magnuss Broadband Service Pvt. Ltd.	0	228	228
746	ZEES BROAD BAND PRIVATE LIMITED	0	228	228
747	KISHAN WEALTH MANAGEMENT PRIVATE LIMITED	0	226	226
748	RIHANT INFOTECH PVT. LTD	0	226	226
749	Ekowebtech IT Services Private Limited	0	225	225
750	HiFi Broadband Pvt. Ltd.	225	0	225
751	METAWAVES PRIVATE LIMITED	0	225	225
752	TELEMANTRRA SALES CORPORATION PRIVATE LIMITED	0	225	225
753	NIKITA INTERNET SERVICES PRIVATE LIMITED	0	224	224
754	AIT Internet Services Pvt. Ltd.	0	222	222
755	Rmax Broadband Pvt. Ltd.	0	222	222
756	Vrednus Network Pvt. Ltd.	0	221	221
757	Speedster Communications Pvt. Ltd	0	220	220
758	ZR NET OPC PVT LTD	220	0	220
759	ACEBROWSE PVT LTD	0	219	219
760	TENG NETWORK SOLUTION PRIVATE LIMITED	219	0	219
761	SPACELINK INTERNET (OPC) PRIVATE LIMITED	0	218	218
762	arrow touch wireless internet private limited	0	217	217
763	CIT SOLUTIONS PVT. LTD.	0	217	217
764	SAIDEEP BROADBAND PRIVATE LIMITED	0	217	217
765	Auspice Infratel Pvt. Ltd.	0	216	216
766	KHUSHI CABLE AND TELEINFRA PRIVATE LIMITED	0	215	215
767	SHREEB NETWORK PVT LTD	0	215	215
768	TAIBA SUPER INTERNET PRIVATE LIMITED	213	0	213
769	Costel Networks Pvt. Ltd.	0	212	212
770	iBus Network & Infrastructure (P) Ltd.	0	212	212
771	Airwire Infocom Pvt. Ltd.	0	211	211
772	Anish Infoline Pvt. Ltd.	0	211	211
773	Enhancelink CoreportPvt. Ltd	0	211	211
774	Tca Network Pvt Ltd	0	211	211
775	Shreepad Communication Pvt. Ltd.	0	210	210
776	ALLIANT NETWORK SOLUTIONS PRIVATE LIMITED	0	208	208
777	OS IT SERVICES PRIVATE LIMITED	0	207	207
778	Peer Networks Private Limited	0	207	207

S.No.	Name of Service Provider	Narrowband	Broadband	Total
779	Sath Technologies Pvt. Ltd.	0	207	207
780	ANODIC TELENETWORK PVT LTD	0	206	206
781	JAYBHOLE CABLE VISION PRIVATE LIMITED	0	206	206
782	Saibaba Broadband Pvt. Ltd.	0	206	206
783	BRAMBHANI TRADERS PVT.LTD.	0	205	205
784	S.V.C CABLE NET PRIVATE LIMITED	0	205	205
785	SFNS NETWORK PVT LTD	0	204	204
786	Sator Square Ventures Private Limited	0	202	202
787	VAIDIK NETSOL OPC PVT LTD	0	202	202
788	VELOCITY INTERNET INDIA PRIVATE LIMITED	202	0	202
789	NETKLIKS COMMUNICATIONS PRIVATE LIMITED	0	201	201
790	Aayu Infonet Pvt. Ltd.	0	200	200
791	Dhadam Hospitality & Services Pvt. Ltd.	0	200	200
792	CLOUDINSTA24 SERVICES PRIVATE LIMITED	0	199	199
793	NEAM COMMUNICATIONS PRIVATE LIMITED	0	199	199
794	YNET TELECOM SOLUTIONS PVT LTD	0	193	193
795	LINKOTEK NETWORK PVT LTD	0	190	190
796	BHAVANI VMD BROADBAND PRIVATE LIMITED	0	189	189
797	FRIDDEN INFOWAY PVT. LTD..	0	189	189
798	Wi5 Internet Services Pvt. Ltd.	0	189	189
799	Cheetah Networks Pvt. Ltd.	0	188	188
800	Promptnet Broadband Pvt. Ltd.	0	188	188
801	M-TEL Networks (P) Ltd	0	186	186
802	SHIVAM WEB NETWORKS PRIVATE LIMITED	0	186	186
803	BT Global Communication India Pvt. Ltd.	0	185	185
804	Neton Icom Pvt. Ltd.	0	185	185
805	Optisky Fibernet Pvt. Ltd.	0	183	183
806	Data Ingenious Global Ltd	0	182	182
807	Vaishnavaihbavi Internet Solutions Private Limited	0	182	182
808	AIRMAX INTERNET PVT LTD	0	181	181
809	VMO BROADBAND PVT LTD	0	180	180
810	AWLIV LIVING SOLUTIONS PRIVATE LIMITED	0	179	179
811	SHIVKRANTI INTERNET SERVICES PVT. LTD.	0	179	179
812	White Stallion Networks Pvt. Ltd.	0	179	179
813	STANET INTERNET SERVICES PRIVATE LIMITED	0	178	178
814	V NETCARE PRIVATE LIMITED	0	178	178
815	BALAJI INFO NETWORKS SOLUTIONS PRIVATE LIMITED	0	177	177
816	Airfiber IT Solutions Pvt. Ltd.	0	176	176
817	WNET TELECOM PRIVATE LIMITED	0	176	176
818	Rae Internet Service Provider Pvt Ltd	0	171	171

S.No.	Name of Service Provider	Narrowband	Broadband	Total
819	CINFOGEN PRIVATE LIMITED	0	170	170
820	Netwire Internet Solutions Pvt. Ltd.	0	168	168
821	Oistel Telecom Pvt. Ltd.	0	166	166
822	Fibernetisp Pvt. Ltd.	0	165	165
823	NAS INTERNET SERVICES PVT LTD	0	165	165
824	NIVID TELECOM INDIA PRIVATE LIMITED	0	165	165
825	Pune Teleinfra Pvt. Ltd..	0	165	165
826	Orange City InternetServices Pvt. Ltd.	0	163	163
827	Wifi Inter-connect Pvt. Ltd.	0	162	162
828	Digitizer Access Network Private Limited	0	160	160
829	Futurenet broadband and internet services pvt ltd	160	0	160
830	smart plus multi services pvt ltd	0	160	160
831	ATMA MALIK 1313 INTERNET SERVICES PVT. LTD.	0	159	159
832	PMG Networks Pvt. Ltd.	0	158	158
833	SGCI Pvt. Ltd.	0	157	157
834	Viking Network Pvt. Ltd	0	157	157
835	IMMORTAL INTERNET PRIVATE LIMITED	0	156	156
836	Antariksh Broadband & Wireless Solution Pvt. Ltd.	0	153	153
837	CLOUDLASERS TELECOM PRIVATE LIMITED	0	152	152
838	Noob Technologies Pvt.Ltd	0	152	152
839	NEXTGEN COMPUSOFT PVT LTD	0	151	151
840	iGEN Networks Private Limited	0	150	150
841	Prateek Netconnect Pvt. Ltd	0	150	150
842	Patil ISP Services (OPC) Pvt. Ltd.	74	74	148
843	Netstra Communications Pvt.. Ltd.	0	147	147
844	TEJNET BROADBAND Pvt Ltd.	0	145	145
845	Sharktel Infocom Pvt. Ltd.	0	144	144
846	LINKED NET TECHNO SERVICES PRIVATE LIMITED	0	143	143
847	VISHWAKARMA BROADBAND PRIVATE LIMITED	0	143	143
848	Ezeenet Internet Solutions Pvt. Ltd.	0	142	142
849	Delix Net Solutions Pvt. Ltd	0	141	141
850	DIGITAL SSV NET SOL PRIVATE LIMITED	0	140	140
851	Sukruti Gcn Networks Pvt. Ltd.	0	140	140
852	KB Digital Network Pvt.Ltd.	0	139	139
853	Teleglobal Communicacions pvt Ltd	139	0	139
854	VIDHI NETSOL PRIVATE LIMITED	0	138	138
855	Achiever Communication and Services Pvt. Ltd.	0	137	137
856	Vision Hi-Speed Technology Pvt. Ltd.	0	137	137
857	Hari Om Netsol Pvt. Ltd.	136	0	136
858	Pyramid Infocom Pvt. Ltd.	136	0	136

S.No.	Name of Service Provider	Narrowband	Broadband	Total
859	GauravCommunication Pvt. Ltd	0	135	135
860	Mediatech Communication Pvt. Ltd.	0	135	135
861	Mahadev Telventures Pvt Ltd	0	134	134
862	Orange Business Services India Network Pvt. Ltd.	0	133	133
863	EZNET INDIA PRIVATE LIMITED	0	132	132
864	AIRMAX SOLUTION AND INTERNET SERVICES PVT LTD	0	131	131
865	POLY INFORMATICS PVT.LTD.	0	129	129
866	Shree Siddhivinayak Cable And Internet Service Provider Private Limited.	0	129	129
867	Wingsnet Internet Pvt.Ltd	0	129	129
868	RAMYAA INTERNET SERVICES PRIVATE LIMITED	0	128	128
869	SHEEN TELECOM CONSULTANTS PVT LTD	0	128	128
870	MLC INTERNET PVT LTD	0	126	126
871	Linkup Networks Pvt. Ltd.	0	125	125
872	A-Net Communication India Pvt.Ltd.	0	123	123
873	NT CYBRONET PRIVATE LIMITED	0	123	123
874	Zubitel Networks Pvt. Ltd.	0	123	123
875	Telstra Telecommunications Private Limited	0	122	122
876	KARRY BROADBAND PRIVATE LIMITED	0	121	121
877	Linktel Info Technology Pvt Ltd	0	121	121
878	JBN Online Pvt. Ltd.	0	119	119
879	Jetato Skynet Services Pvt. Ltd.	0	118	118
880	LEVOTEL BIGNET SOLUTIONS PRIVATE LIMITED	0	118	118
881	V NET NETWORKS PVT. LTD	0	118	118
882	Magica Networking Solutions Pvt. Ltd.	0	117	117
883	ASVISH TECHNOLOGY PARTNER (OPC) PVT LTD	0	116	116
884	R3ESOLUTION Pvt Ltd.	0	116	116
885	Clickr Services Private Limited	0	114	114
886	Blenda Internet ServicesIndia Pvt. Ltd.	0	113	113
887	Pronoc Technologies Pvt. Ltd.	0	113	113
888	Joshi Internet Services Pvt. Ltd.	0	111	111
889	Japra Tele Link Pvt. Ltd.	0	110	110
890	Jasnet Networks Pvt. Ltd.	16	94	110
891	Pier Communication Pvt. Ltd	0	110	110
892	E I DOT Com Pvt. Ltd.	0	109	109
893	NR IT Service Pvt. Ltd.	0	109	109
894	Durga Broadband Pvt. Ltd.	0	108	108
895	FIBERMAX PRIVATE LIMITED	0	108	108
896	Saisidhivinayank Internet service private limited	0	105	105

S.No.	Name of Service Provider	Narrowband	Broadband	Total
897	SKYNET E-SOLUTION PRIVATE LIMITED (erstwhile known as Skynet Broadband Pvt. Ltd.)	0	105	105
898	ITech Hive Pvt. Ltd	0	104	104
899	Thangam Communications Pvt.Ltd.	0	104	104
900	Rohela Broadband Network Pvt. Ltd.	0	103	103
901	Khetan Cable Network (P) Ltd	0	102	102
902	Invensys Networks Pvt.Ltd.	0	101	101
903	Ayman Internet Pvt. Ltd.	0	100	100
904	Netlife Network Pvt. Ltd..	0	100	100
905	swami Samarth Broadband Service Pvt Ltd	0	100	100
906	FLIX BROADBAND SERVICES PRIVATE LIMITED	0	99	99
907	NEXAEDGE INDIA Pvt Ltd.	0	98	98
908	Broad Net India Pvt. Ltd.	0	97	97
909	JAGUAR BYTE TECHNOLOGY PRIVATE LIMITED	0	97	97
910	SADBUDHHI SOLUTIONS PVT LTD	0	97	97
911	AXOMNET BROADBAND Pvt. LTD.	0	95	95
912	GSDN COMMUNICATION PRIVATE LIMITED	0	95	95
913	Winnet Broadband Pvt. Ltd.	0	95	95
914	Datawings Teleinfra Private Limited	0	94	94
915	SPEEDNET OPTICAL NETWORK Pvt Ltd.	0	93	93
916	Satpar Infotech Pvt Ltd	0	93	93
917	TENTEQ BROADBAND PVT. LTD.	0	93	93
918	PAWAN BROADBAND INDIA PVT LTD	0	91	91
919	Aircables Internet Services Pvt. Ltd.	0	90	90
920	NSD Internet Private Limited	0	90	90
921	S A Internet Solution Pvt Ltd	0	90	90
922	Bilal Internet Services Private Limited	0	89	89
923	INFINITY WIRELESS SERVICES PVT. LTD.	0	89	89
924	MICRONOVA TELE SYSTEMS PRIVATE LTD.	0	89	89
925	AATTIZEN TELECOM PRIVATE LIMITED	0	88	88
926	Dataexpress Pvt. Ltd	0	88	88
927	Gaxiom Networking Solutions Private Limited	0	88	88
928	Inic Communications Private Limited	0	88	88
929	SPEEDNET INFORMEDIA PVT LTD	0	88	88
930	DHUNI NETSOL PRIVATE LIMITED	0	87	87
931	Vishwamani Solutions Pvt Ltd	0	87	87
932	Fabnet Services Private Limited	0	86	86
933	Kelnet Communication Services Pvt. Ltd	0	85	85
934	ASHOKA NETSOL PVT LTD	0	84	84
935	IT Spectrum Media Pvt Ltd	0	84	84
936	Euron Communication Pvt. Ltd.	0	83	83

S.No.	Name of Service Provider	Narrowband	Broadband	Total
937	NENCY CABLE PVT LTD	0	81	81
938	Omkar Net Services Pvt. Ltd.	0	81	81
939	PATHCOM COMMUNICATIONS PRIVATE LIMITED	0	81	81
940	Heramb T-10 Network Pvt. Ltd..	0	80	80
941	Precious Netcom Pvt Ltd	0	80	80
942	DAMAN I NET (OPC) PRIVATE LIMITED	0	78	78
943	Suryasspeed Network Pvt Ltd	0	78	78
944	nwt internet services private limited	0	77	77
945	WAGHESHWAR NETVISION PRIVATE LIMITED	0	77	77
946	GAYATRI TELECOM PVT LTD	0	75	75
947	G-Max IT Services Pvt. Ltd.	0	75	75
948	WEBIZY TECHSOL PVT LTD	0	75	75
949	IOEACCESS COMMUNICATIONS PVT LTD	0	74	74
950	Shri Vinayagaa Internet Pvt Ltd	0	74	74
951	NR Data Service Pvt Ltd.	0	72	72
952	Plusnet Communications Pvt. Ltd.	0	72	72
953	SHERAWAT INFOTECH PRIVATE LIMITED	0	72	72
954	SBDR NETWORK SOLUTIONS PRIVATE LIMITED	0	71	71
955	Denet Connect Services Pvt Ltd	0	70	70
956	IKRA Broadband Private Limited	0	70	70
957	MABA SAFENET BROADBAND SERVICES PVT LTD	0	70	70
958	Speednet Enterprises (OPC) Pvt. Ltd.	0	70	70
959	Tamana Winet Pvt. Ltd.	0	70	70
960	Ekdant Communication Pvt. Ltd.	0	69	69
961	Sanavi Infotech (OPC) Pvt. Ltd.	34	35	69
962	Amity Hua Electronics Pvt. Ltd.	0	67	67
963	Nextech Broadband Pvt.Ltd	0	65	65
964	Pteron Communication Pvt. Ltd	0	65	65
965	Veer Point Pvt. Ltd.	0	65	65
966	FIBERLINK COMMUNICATION PRIVATE LIMITED	0	64	64
967	Jeebr Cloud Solutions Private Limited	0	64	64
968	JETONE FIBER PRIVATE LIMITED	0	64	64
969	Mark Networks SolutionsIndia Pvt. Ltd.	0	64	64
970	WINUX COMMUNICATIONS PVT LTD	0	64	64
971	Abis BadlapurNetwork Pvt. Ltd.	0	63	63
972	EASYNET BROADBAND PVT LTD	0	63	63
973	GJ2 INTERNET PRIVATE LIMITED	0	63	63
974	Jai Mata Di Telectronix Pvt. Ltd.	0	63	63
975	Sankrish Infocom Private Limited	0	62	62
976	U-FIBER BROADBAND PRIVATE LIMITED	0	61	61
977	WIRED2COMMUNICATION PRIVATE LIMITED	0	61	61

S.No.	Name of Service Provider	Narrowband	Broadband	Total
978	Broadstar Net India Pvt. Ltd.	0	60	60
979	Kim Broadband Services Pvt. Ltd.	0	60	60
980	S.G.I.C SERVICES PRIVATE LIMITED	0	60	60
981	GURU NETCOM PVT. LTD.	0	59	59
982	SEVENNET BROADBAND SERVICES PRIVATE LIMITED	0	58	58
983	Infiber Broadnet Pvt. Ltd.	0	56	56
984	Ajay Cable & Broadband Service OPC Pvt. Ltd	0	55	55
985	Malachandra Broadband Services Private Limited	0	55	55
986	Trivoz Digital Networks Pvt. Ltd.	0	55	55
987	Bloglytics Internet Pvt.Ltd	0	54	54
988	Froze Communications Pvt. Ltd.	0	54	54
989	FutureNet Telecom Private Limited	54	0	54
990	Playernet Technologies Private Limited	0	54	54
991	SEYFERT NETWORKS PRIVATE LIMITED	0	54	54
992	BEAURACK VELOCITY INFOCOM PVT LTD	0	53	53
993	BRIGHTNET INTERNET SOLUTIONS (OPC) PRIVATE LIMITED	0	53	53
994	Elyzium Globenet Pvt. Ltd.	0	53	53
995	NAS Broadband Pvt. Ltd	0	53	53
996	Hansin IT Services Private Limited	0	52	52
997	VIDARBHA WI-FI AND NETWORK SERVICES PVT LTD.	0	52	52
998	MAXWEB MULTIMEDIA PRIVATE LIMITED	0	51	51
999	Samruddhi Communication Pvt. Ltd.	0	51	51
1000	BRIZZ BROADBAND PRIVATE LIMITED	0	50	50
1001	DNet E Solutions Pvt. Ltd.	0	50	50
1002	Nextra Teleservices Pvt. Ltd.	0	48	48
1003	Quantasoul Airologix Pvt. Ltd.	0	47	47
1004	A M Broadband Pvt.Ltd	0	47	47
1005	ACHARE BROADBAND (OPC) PRIVATE LIMITED	0	47	47
1006	Fibernet Solutions (OPC) Pvt. Ltd.	0	47	47
1007	GIGANETWORK INFO PRIVATE LIMITED	0	47	47
1008	Gponospace Internet India Pvt. Ltd.	0	47	47
1009	ZITA TELECOM PRIVATE LIMITED	0	47	47
1010	Gigalo Communication Pvt Ltd	9	37	46
1011	NM Paribas Private Limited	0	46	46
1012	VIVA Communications Pvt Ltd	0	46	46
1013	Creative BroadbandServices Pvt. Ltd	0	45	45
1014	HAPPY BYTES BROADBAND (OPC) PRIVATE LIMITED	0	45	45
1015	PADMESH BROADBAND PRIVATE LIMITED	0	45	45

S.No.	Name of Service Provider	Narrowband	Broadband	Total
1016	Priveka Web Services Pvt. Ltd.	0	45	45
1017	SPEEDNET247 SOLUTIONS PRIVATE LIMITED	0	45	45
1018	ALANDI CITY NETWORKS PRIVATE LIMITED	0	44	44
1019	MARUTI INTERACTIVE NETWORK PRIVATE LIMITED	0	44	44
1020	Tiruppur Broadwave Pvt. Ltd.	0	44	44
1021	Speedobits Internet Private Limited	0	43	43
1022	Fastx Broadband Pvt. Ltd.	0	42	42
1023	KUNAL SPEEDNET SOLUTIONS Pvt. LTD	0	42	42
1024	Stromnet Broadband ServicesPrivate Limited	0	41	41
1025	Ziptel IT Solutions Pvt. Ltd.	26	15	41
1026	Jmohit Cable Vision Pvt. Ltd.	0	40	40
1027	GENIUS NETWORK PRIVATE LIMITED	0	38	38
1028	Manumata Fiber Net Solutions PVT LTD	0	38	38
1029	DFAB INTERNET SERVICES PRIVATE LIMITED	0	36	36
1030	INTRO TELECOM Pvt Ltd.	0	36	36
1031	JKM DIGITAL SERVICES (OPC) PVT LTD	0	36	36
1032	R.P. World Telecom Pvt. Ltd.	0	36	36
1033	AMIGOS BROADBAND PVT LTD	5	30	35
1034	ANSH NET SOL PRIVATE LIMITED	0	35	35
1035	FASTHOOK NETWORKS PVT LTD	0	35	35
1036	Nelco Ltd.	15	20	35
1037	JM INTERNET AND BROADBAND SERVICES PRIVATE LIMITED	0	34	34
1038	STABLE NETWORK PVT LTD	0	34	34
1039	Tarantula WebNetworks Pvt. Ltd.	0	34	34
1040	Edge Telecommunications Pvt. Ltd.	33	0	33
1041	KHETAN TELECOMMUNICATIONS PRIVATE LIMITED	0	33	33
1042	CABLECOM NETWORK PRIVATE LIMITED	0	32	32
1043	Doonbroadband Pvt. Ltd.	0	31	31
1044	DREAMCABLES AND INTERNET SERVICES PRIVATE LIMITED	0	31	31
1045	IndrayaniCommunication Pvt. Ltd	0	30	30
1046	Kutch Telelink Pvt. Ltd.	0	30	30
1047	SHRAVI COMMUNICATION PVT LTD	0	30	30
1048	RISING INTERNET PRIVATE LIMITED	0	29	29
1049	ST BROADBAND CABLE SERVICE PRIVATE LIMITED	0	29	29
1050	Streamax Broadband Services Pvt. Ltd	0	29	29
1051	HELM CONSULTANTS PVT LTD	28	0	28
1052	KORD BROADBAND SERVICES PRIVATE LIMITED	0	28	28

S.No.	Name of Service Provider	Narrowband	Broadband	Total
1053	SASH Broadband Private Limited	14	14	28
1054	Skynet Zone Wifi Services (P) Ltd.	0	28	28
1055	J AND D COMMUNICATIONS PRIVATE LIMITED	0	27	27
1056	WE INTERNET LIMITED	0	27	27
1057	DENSIS ONLINE PVT LTD	0	26	26
1058	Spacetrade Internet Pvt Ltd	0	26	26
1059	DRONAGIRI INFOTECH PVT LTD	0	25	25
1060	LECTO TECH BROADBAND PRIVATE LIMITED	0	25	25
1061	SAMVAD TELECOM	19	6	25
1062	Sudhana Telecommunication Pvt Ltd.	0	25	25
1063	TREELINK NETWORK PVT LTD	0	25	25
1064	Unified Voice Communication Pvt. Ltd.	0	25	25
1065	AVD INFOCOM PRIVATE LIMITED	0	24	24
1066	Pacific Internet India Pvt. Ltd.	0	23	23
1067	Praveen Telecom Pvt. Ltd.	0	23	23
1068	Saagars Channel Pvt. Ltd.	0	23	23
1069	Aerocast Networks Pvt Ltd.	0	22	22
1070	Airlink Teleservices Private Limited	0	22	22
1071	FURIOUSPEED PRIVATE LIMITED	0	22	22
1072	LIVE FIBERNET SERVICE PRIVATE LIMITED	0	22	22
1073	Smartware Technologies Pvt. Ltd.	0	22	22
1074	Pintwire Infomatics Pvt. Ltd.	0	21	21
1075	BUDANTA NETWORKS PRIVATE LIMITED	0	20	20
1076	Rita Infocom Pvt. Ltd.	0	18	18
1077	Sun Broadband and Data Services PVT. LTD.	0	18	18
1078	FUTURE INTERNET PRIVATE LIMITED	0	17	17
1079	ERNET India	0	17	17
1080	TELESECURE COMMUNICATIONS PRIVATE LIMITED	0	17	17
1081	HELLO NETWORK SERVICE Pvt Ltd.	0	16	16
1082	Hienet Internet Services Pvt. Ltd.	0	16	16
1083	Mesh Infranet Pvt. Ltd.	0	16	16
1084	Mpr Infonet Systems Private Limited	0	16	16
1085	CL INTERNET SERVICE PRIVATE LIMITED	0	15	15
1086	Microtel Internet Network Pvt. Ltd.	0	15	15
1087	MILAN MULTISERVICES PRIVATE LIMITED	15	0	15
1088	Saraswati Internet Solution Pvt Ltd	0	15	15
1089	WORLDSKY ONLINE PRIVATE LIMITED	0	15	15
1090	Haze Internet Services Private Limited	0	14	14
1091	JARIMARI PRIVATE LIMITED	0	14	14
1092	Marutham Networks Pvt. Ltd.	0	14	14

S.No.	Name of Service Provider	Narrowband	Broadband	Total
1093	Play Bunch Entertainment Pvt Ltd	0	14	14
1094	SAI LEELA'S INTERNET SERVICE PVT. LTD.	0	14	14
1095	SPEEDPULSE DIGITAL NETWORK PRIVATE LIMITED	0	14	14
1096	Ultrawave Internet Access Pvt. Ltd.	1	13	14
1097	Comtel Services Pvt. Ltd.	0	12	12
1098	NP-GOLDNET PRIVATE LIMITED	0	12	12
1099	Orbitedge Broadband Private Limited	0	12	12
1100	Passcom System and Services Pvt. Ltd.	0	12	12
1101	ANGROW NETCOMM PRIVATE LIMITED	0	11	11
1102	NETVIGATOR BROADBAND PVT LTD	0	11	11
1103	WAY 2 INTERNET Pvt Ltd.	0	11	11
1104	10G TELECOM PVT LTD	0	10	10
1105	DIGITAL OXYGEN PRIVATE LIMITED	0	10	10
1106	Jet Netcom Broadband Pvt. Ltd.	0	10	10
1107	SB LINK INFOSERVE PRIVATE LIMITED	0	10	10
1108	Speed WiFi Pvt. Ltd.	0	10	10
1109	TLN COMMUNICATION PRIVATE LIMITED	0	10	10
1110	Upnet Communications Pvt. Ltd.	0	10	10
1111	VISHVA INFRATEL PRIVATE LIMITED	0	10	10
1112	Ceralink Communication Pvt Ltd	9	0	9
1113	DYSINT NETWORKS PRIVATE LIMITED	0	9	9
1114	SMPL Networks Pvt. Ltd.	0	9	9
1115	WORLD PHONE INTERNET SERVICES PVT LTD	0	9	9
1116	CELESTIAL LINK PRIVATE LIMITED	0	8	8
1117	GOLCON TECHNOLOGIES PRIVATE LIMITED	0	8	8
1118	Tatanet Services Ltd	0	8	8
1119	Uttradoon Networks Pvt. Ltd.	0	8	8
1120	CIFY IT Services Pvt. Ltd.	0	7	7
1121	Riyaz Internet Services Pvt. Ltd.	0	7	7
1122	SPACE INTERNET PRIVATE LIMITED	0	7	7
1123	Clear Beam Communication Pvt. Ltd.	0	6	6
1124	DAVA TELECOM PRIVATE LIMITED	0	6	6
1125	Fibmesh IN Limited	0	6	6
1126	GPX India Services Pvt. Ltd.	0	6	6
1127	Hybrid Hash Pvt. Ltd.	0	6	6
1128	Kartik Network Pvt. Ltd.	0	6	6
1129	A TO Z INFOLINK PVT. LTD.	0	5	5
1130	AISN INTERNET SERVICE PRIVATE LIMITED	0	5	5
1131	Aristo Telenet Pvt Ltd	0	5	5
1132	Blueline ISP Pvt. Ltd	0	5	5

S.No.	Name of Service Provider	Narrowband	Broadband	Total
1133	EI BROADBAND PVT LTD.	5	0	5
1134	SAMAIRA INFOTECH PVT. LTD.	0	5	5
1135	YOTTA NETWORK SERVICES PRIVATE LIMITED	0	5	5
1136	ZAPTIC PRIVATE LIMITED	0	5	5
1137	ESP Fibernet Pvt. Ltd.	0	4	4
1138	POWERNET TELECOM PRIVATE LIMITED	0	4	4
1139	UBERCORE DATA LABS PVT LTD	0	4	4
1140	AGILE NETLINK PRIVATE LIMITED	0	3	3
1141	Critel Technologies Pvt. Ltd.	0	3	3
1142	DISHAWAVES INFOTECH PRIVATE LIMITED	0	3	3
1143	METICULOUS NETWORKS PRIVATE LIMITED	0	3	3
1144	Mount Edge Digital Services Pvt Ltd	3	0	3
1145	MRKR COMMUNICATIONS PRIVATE LIMITED	0	3	3
1146	V-CON Mobile & Infra private limited	0	3	3
1147	ACTIVELINK NETWORK PVT. LTD.	2	0	2
1148	Airnat IT Solutions Pvt. Ltd.	0	2	2
1149	Cloudcast Digital Ltd.	0	2	2
1150	GEGA BROADBAND SOLUTION PRIVATE LIMITED	0	2	2
1151	Isyan Communication Pvt. Ltd	0	2	2
1152	LIIMMRA CONNECT PVT.LTD.	1	1	2
1153	My Digital NetworkLtd.	0	2	2
1154	Red Fiber Telecom Pvt Ltd	0	2	2
1155	Sabse Internet Service Provider Pvt. Ltd.	0	2	2
1156	Sai Technix Pvt Ltd	0	2	2
1157	Winet Infratel Pvt. Ltd.	0	2	2
1158	B PRIMO INTERNET SERVICES PVT LTD	0	1	1
1159	BHUMITAT ISP PRIVATE LIMITED	0	1	1
1160	ESTO MEDIA PRIVATE LIMITED	0	1	1
1161	FLYFAST CONNECTIONS Pvt. LTD	0	1	1
1162	MINDAGE BROADCASTING Pvt. LTD	0	1	1
1163	Nuozen Telecom Pvt. Ltd.	0	1	1
1164	Sahiba Silk Mills Pvt. Ltd.	0	1	1
1165	SHYAM DATA & VOICE SERVICES PVT LTD	0	1	1
1166	SOFTNET NETWORK PVT LTD	0	1	1
1167	VERIZONE BROADBAND SERVICES PRIVATE LIMITED	0	1	1
	Total	31624849	904535604	936160453
	Total (in million)	31.62	904.54	936.16

*The information is compiled based on the reports being received from the Internet Service Providers

Annexure 1.6: State/UT-wise Public Wi-Fi Hotspots as on 31.12.2023

S.No.	State/UT	Sum of Number of Public Wi-Fi Hotspots	Sum of Number of Access Points	Sum of Number of unique Wi-Fi Users	Sum of Aggregate Data Consumed (GB)
1	Andhra Pradesh	3875	6951	267792	157491
2	Arunachal Pradesh	484	1024	3530	8180
3	Assam	787	1719	195352	129056
4	Bihar	31075	32907	849231	508971
5	Chattisgarh	4586	10756	133817	100539
6	Goa	158	581	9718	9041
7	Gujarat	6840	14282	430600.57	428915
8	Haryana	6585	9915	129573	68138
9	Himachal Pradesh	1119	2272	19766	14864
10	Jharkhand	2940	5914	228851	169146
11	Karnataka	8554	26475	269022	148638
12	Kerala	3955	8184	499312	236342
13	Madhya Pradesh	14859	26787	436062	258400
14	Maharashtra incl. Mumbai	17619	39224	1390690	839999
15	Manipur	74	252	677	656
16	Meghalaya	181	508	3436	28095
17	Mizoram	35	121	1688	3095
18	Nagaland	81	262	7090	4489
19	Odisha	3615	5730	265009	163322
20	Punjab	9614	11655	95614	76692
21	Rajasthan	2725	8054	340255	212100
22	Sikkim	47	334	1399	744
23	Tamil Nadu incl. Chennai	2046	6809	240951	168266
24	Telangana	5980	14627	207477	142693
25	Tripura	666	782	16294	10135
26	Uttar Pradesh (UPE+UPW)	28702	114845	797196	522183
27	Uttarakhand	1679	5153	34078	60895
28	West Bengal incl. Kolkata	3779	12061	653137	343026
Union territories					
29	Andaman & Nicobar Islands	48	154	77	281
30	Chandigarh	91	839	6337	2901
31	Dadar & Nagar Haweli & Daman & Diu	41	41	0	0
32	Delhi	687	11538	348673	151157
33	Jammu & Kashmir	1523	3239	48437	18691
34	Ladakh	0	0	0	0
35	Lakshdweep	0	0	0	0
36	Puduchery	113	687	1108	12908
	Total	165163	384682	7932250	5000047

Annexure 1.7: List of Service Providers which reported IP Telephony Minutes for Q.E. December-23

S. No.	Name of Service Providers reported IP Telephony Minutes as on 31st December 2023
1	Alliance Broadband Services Pvt. Ltd.
2	Novanet Ltd.
3	Viva Communications Pvt. Ltd.
4	Weco Infotech Pvt. Ltd.
5	Shyam Spectra Private Limited.
6	delDSL Internet Pvt Ltd
7	Pulse Telesystems Pvt. Ltd.
8	Sify Technologies Ltd.
9	Tata Communications Limited
10	Trikon Electronics Pvt. Ltd.
11	World Phone Internet Services Pvt. Ltd.
12	Skyfall Voice Communications Pvt. Ltd.
13	Warmconnect Internet Services Pvt. Ltd.
14	Reticule Infotech Pvt. Ltd.

Annexure 1.8: Service Area wise PMRTS subscriber Base

Annexure 1.8: Service Area wise PMRTS subscriber Base					
S.No.	DOT Licensed Service	Area Served	Service Provider	Subscriber Base	
				30.09.2023	31.12.2023
1	Andhra Pradesh	Hyderabad	Arya Omnitalk Radio Trunking Services Pvt.Ltd.	2,640	2,703
			QuickCall	1,080	1,100
		Visakhapatnam	Arya Omnitalk Radio Trunking Services Pvt.Ltd.	4,041	4,036
			Total	7,761	7,839
2	Delhi	Delhi	Arya Omnitalk Radio Trunking Services Pvt.Ltd.	6,889	6,656
			Procall Ltd.	3,946	3,974
		Total	10,835	10,630	
3	Gujarat	Ahmedabad	Arya Omnitalk Radio Trunking Services Pvt.Ltd.	1,072	1,167
		Amrela	Inative Networks Pvt. Ltd.	-	-
		Bharuch	Arya Omnitalk Radio Trunking Services Pvt.Ltd.	1,612	1,643
			Inative Networks Pvt. Ltd.	-	-
		Dahej	Arya Omnitalk Radio Trunking Services Pvt.Ltd.	1,652	1,755
		Jamnagar	Inative Networks Pvt. Ltd.	360	360
		Kutch	Inative Networks Pvt. Ltd.	205	205
			Arya Omnitalk Radio Trunking Services Pvt.Ltd.	2,012	2,111
		Surat	Inative Networks Pvt. Ltd.	895	895
			Arya Omnitalk Radio Trunking Services Pvt.Ltd.	1,831	1,779
Vadodara	Inative Networks Pvt. Ltd.	360	360		
Total	9,999	10,275			
4	Karnataka	Bangalore	Arya Omnitalk Radio Trunking Services Pvt.Ltd.	7,646	7,509
			QuickCall	474	475
		Total	8,120	7,984	
5	Kerala	Ernakulam	Arya Omnitalk Radio Trunking Services Pvt.Ltd.	1,001	1,033
		Kerala	Wiwanet Solutions Pvt. Ltd	1,146	1,146
		Total	2,147	2,179	
6	Kolkata	Kolkata	Arya Omnitalk Radio Trunking Services Pvt.Ltd.	1,563	1,572
7	Madhya Pradesh	Indore	Arya Omnitalk Radio Trunking Services Pvt.Ltd.	1,872	1,860
8	Maharashtra	Khandala	Arya Omnitalk Radio Trunking Services Pvt.Ltd.	491	506
			Pune	Arya Omnitalk Radio Trunking Services Pvt.Ltd.	1,685
		Smartalk Pvt Ltd.	636	607	
		Total	2,812	2,844	
9	Mumbai	Mumbai	Airtalk Solutions & Services Pvt. Ltd.	934	1,215
			Arya Omnitalk Radio Trunking Services Pvt.Ltd.	9,058	9,060
			Bhilwara Telenet Services Pvt.Ltd.	817	849
			Smartalk Pvt Ltd.	842	805
		Total	11,651	11,929	
10	Rajasthan	Jaipur	Arya Omnitalk Radio Trunking Services Pvt.Ltd.	913	889
			Procall Ltd.	490	463
		Total	1,403	1,352	
11	Tamil Nadu	Chennai	Arya Omnitalk Radio Trunking Services Pvt.Ltd.	7,281	7,311
			QuickCall	367	374
		Total	7,648	7,685	
Grand Total				65,811	66,149

**Annexure 2.1: Wireless Revenue Service - Service Area wise Statistics for
QE Dec, 2023**

Key parameters for service areas of category-A

Service Area	% of pre-paid in total subscribers	ARPU (Rs. per month)	Total usage (from & outside HSA) per subscriber per month			
			Outgoing SMS	Outgoing MOU	Incoming MOU	Total MOU
AP	92.99%	181	10	466	454	920
Gujarat	93.16%	159	13	399	384	783
Karnataka	89.19%	178	13	473	459	932
MH	94.13%	163	12	405	396	801
TN (incl. Chennai)	90.61%	179	9	432	426	858

Key parameters for service areas of category-B

Service Area	% of pre-paid in total Subscribers	ARPU (Rs. per month)	Total usage (from & outside HSA) per subscriber per month			
			Outgoing SMS	Outgoing MOU	Incoming MOU	Total MOU
Haryana	89.77%	130	7	426	418	844
Kerala	95.60%	167	5	333	333	665
MP	95.18%	142	13	461	451	912
Punjab	93.55%	161	7	419	401	819
Rajasthan	95.64%	151	9	459	454	913
UP(E)	96.29%	122	11	592	593	1185
UP(W)	96.18%	137	11	491	490	980
WB	97.66%	146	13	526	524	1050

Key parameters for service areas of category-C

Service Area	% of pre-paid in total subscribers	ARPU (Rs. per month)	Total usage (from & outside HSA) per subscriber per month			
			Outgoing SMS	Outgoing MOU	Incoming MOU	Total MOU
Assam	96.80%	157	23	558	558	1115
Bihar	95.53%	134	10	635	647	1283
HP	96.87%	173	9	495	486	981
J&K	39.65%	178	23	605	574	1179
NE	97.30%	170	30	511	510	1021
Odisha	96.21%	148	16	573	575	1148

Key parameters for service areas of category-Metro

Service Area	% of pre-paid in total subscribers	ARPU (Rs. per month)	Total usage (from & outside HSA) per subscriber per month			
			Outgoing SMS	Outgoing MOU	Incoming MOU	Total MOU
Kolkata	92.81%	117	9	418	402	820
Delhi	77.68%	147	8	466	431	897
Mumbai	80.05%	146	8	427	377	803

Annexure 4.1: Performance of QoS Parameters for Cellular Mobile Service

LSA Name	TSP Name	Network Related Parameters										Customer Service Quality Parameters										
		Network Availability		Connection Establishment (Accessibility)			Connection Maintenance (Retainability)					POI	Metering and Billing					Response time to the customer for assistance		Termination / closure of service		
		BS Accumulated down-time (not available for service) (%)	Worst affected BSs due to down-time (%)	Call Set-up Success Rate and Session Establishment Success Rate for Circuit-Switched Voice or VoLTE as applicable	SDCCH/ Paging Channel Congestion/ RRC Congestion (%)	TCH, RAB and E-RAB Congestion (%)	Network QoS DCR Spatial Distribution Measure (Network_QSD(90,90))	Network QoS DCR Temporal Distribution Measure (Network_QTD(97,90))	Connections with good voice quality, Circuit-Switched Voice Quality and VoLTE quality	Down Link (DL) Packet Drop Rate or DL-PDR	Up Link (UL) Packet Drop Rate or UL-PDR	Point of interconnection (POI) Congestion (on individual POI) - No. of POIs not meeting the	Metering and billing credibility - post paid	Metering and billing credibility - pre paid	Resolution of billing/charging complaints- within 4 weeks	Resolution of billing/charging complaints- within 6 weeks	Period of applying credit/waiver/ adjustment to customer's account from the date of resolution of complaints	Accessibility of call center/customer care	Percentage of calls answered by the operators (voice to voice) within ninety seconds	Termination / Closure of service	Time taken for refund of deposits after closures	
		<=2%	<=2%	>=95%	<=1%	<=2%	<=2%	<=3%	>=95%	<=2%	<=2%	<=0.5	<=0.1%	<=0.1%	98% within 4 weeks	100% within 6 weeks	100% within 1 week of resolution of complaint	>=95%	>=95%	<= 7 days	100% within 60 days	
Andhra Pradesh	AIRTEL	0.09%	0.42%	99.49%	0.20%	0.24%	0.90%	1.20%	96.56%	0.16%	0.16%	0	0.03%	0.00%	100.00%	100.00%	100.00%	100.00%	97.51%	100.00%	100.00%	
	BSNL	1.01%	1.69%	98.74%	0.66%	0.57%	1.55%	1.61%	98.90%	0.11%	0.29%	0	0.00%	0.00%	100.00%	100.00%	100.00%	100.00%	96.47%	95.13%	100.00%	100.00%
	RJIL	0.03%	0.04%	99.66%	0.03%	0.00%	0.19%	0.28%	99.95%	0.00%	0.09%	0	0.00%	0.00%	100.00%	100.00%	100.00%	100.00%	99.40%	99.40%	100.00%	100.00%
	VIL	0.10%	1.08%	99.23%	0.37%	0.07%	1.60%	2.08%	97.93%	0.08%	0.21%	0	0.00%	0.00%	100.00%	100.00%	100.00%	100.00%	99.21%	99.99%	100.00%	100.00%
Assam	AIRTEL	0.22%	0.96%	99.09%	0.21%	0.44%	1.82%	2.13%	96.54%	0.22%	0.25%	0	0.04%	0.00%	100.00%	100.00%	100.00%	100.00%	98.24%	100.00%	100.00%	
	BSNL	1.91%	1.68%	98.27%	0.86%	1.81%	1.95%	2.12%	98.56%	1.74%	1.81%	0	0.02%	0.00%	100.00%	100.00%	100.00%	100.00%	98.32%	96.71%	100.00%	100.00%
	RJIL	0.17%	0.59%	99.74%	0.02%	0.00%	0.40%	0.51%	99.95%	0.00%	0.10%	0	0.00%	0.00%	100.00%	100.00%	100.00%	100.00%	98.91%	98.75%	100.00%	100.00%
	VIL	0.56%	1.60%	99.44%	0.30%	0.56%	1.83%	2.94%	97.81%	0.08%	0.10%	0	0.00%	0.00%	100.00%	100.00%	100.00%	100.00%	99.16%	99.97%	100.00%	100.00%
Bihar	AIRTEL	0.09%	0.02%	98.11%	0.02%	0.67%	1.54%	1.65%	97.12%	0.18%	0.09%	0	0.03%	0.00%	100.00%	100.00%	100.00%	100.00%	97.21%	100.00%	100.00%	
	BSNL	1.94%	1.89%	97.16%	0.30%	0.28%	1.70%	2.08%	98.00%	0.00%	0.00%	0	0.00%	0.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	
	RJIL	0.06%	0.13%	99.59%	0.01%	0.00%	0.32%	0.43%	99.95%	0.00%	0.10%	0	0.00%	0.00%	100.00%	100.00%	100.00%	100.00%	98.80%	98.42%	100.00%	100.00%
	VIL	0.11%	1.38%	99.92%	0.18%	0.04%	1.64%	2.30%	99.43%	0.06%	0.17%	0	0.00%	0.00%	100.00%	100.00%	100.00%	100.00%	97.85%	99.85%	100.00%	100.00%
Delhi	AIRTEL	0.20%	1.80%	99.49%	0.13%	0.19%	1.39%	2.16%	95.02%	0.31%	0.22%	0	0.02%	0.00%	99.94%	100.00%	100.00%	100.00%	97.25%	100.00%	100.00%	
	MTNL	0.06%	0.23%	97.50%	0.18%	0.86%	1.28%	1.45%	98.42%	NA	NA	0	0.00%	0.00%	100.00%	100.00%	100.00%	100.00%	99.99%	99.57%	100.00%	100.00%
	RJIL	0.05%	0.15%	99.58%	0.03%	0.00%	0.20%	0.31%	99.94%	0.00%	0.11%	0	0.00%	0.00%	100.00%	100.00%	100.00%	100.00%	98.70%	99.09%	100.00%	100.00%
	VIL	0.04%	0.09%	99.81%	0.12%	0.19%	1.47%	1.97%	99.52%	0.13%	0.22%	0	0.01%	0.00%	100.00%	100.00%	100.00%	100.00%	99.94%	99.96%	100.00%	100.00%
Gujarat	AIRTEL	0.07%	0.24%	99.42%	0.16%	0.23%	1.59%	2.04%	96.38%	0.10%	0.19%	0	0.03%	0.00%	100.00%	100.00%	100.00%	100.00%	97.66%	100.00%	100.00%	
	BSNL	0.33%	1.23%	98.11%	0.12%	0.52%	1.47%	2.05%	98.50%	0.12%	0.18%	0	0.00%	0.00%	100.00%	100.00%	100.00%	100.00%	99.91%	96.03%	100.00%	100.00%
	RJIL	0.09%	0.17%	99.68%	0.01%	0.00%	0.15%	0.25%	99.96%	0.00%	0.09%	0	0.00%	0.00%	100.00%	100.00%	100.00%	100.00%	98.91%	98.93%	100.00%	100.00%
	VIL	0.05%	0.18%	99.62%	0.11%	0.31%	1.75%	2.22%	97.03%	0.13%	0.17%	0	0.01%	0.00%	100.00%	100.00%	100.00%	100.00%	98.57%	99.96%	100.00%	100.00%
Haryana	AIRTEL	0.12%	0.90%	99.61%	0.12%	0.13%	1.56%	1.79%	95.13%	0.16%	0.15%	0	0.02%	0.00%	100.00%	100.00%	100.00%	100.00%	100.00%	97.55%	100.00%	100.00%
	BSNL	0.83%	0.58%	99.03%	0.21%	0.52%	1.83%	1.79%	97.03%	0.14%	0.43%	0	0.00%	0.00%	100.00%	100.00%	100.00%	100.00%	95.49%	99.93%	100.00%	100.00%
	RJIL	0.06%	0.27%	99.68%	0.01%	0.00%	0.35%	0.60%	99.96%	0.00%	0.09%	0	0.00%	0.00%	100.00%	100.00%	100.00%	100.00%	98.77%	99.25%	100.00%	100.00%
	VIL	0.04%	0.22%	99.66%	0.33%	0.34%	1.89%	2.94%	98.53%	0.08%	0.11%	0	0.00%	0.00%	100.00%	100.00%	100.00%	100.00%	99.23%	99.96%	100.00%	100.00%
Himachal Pradesh	AIRTEL	0.22%	1.83%	99.80%	0.21%	0.20%	0.98%	1.20%	95.40%	0.18%	0.14%	0	0.04%	0.00%	100.00%	100.00%	100.00%	100.00%	97.76%	100.00%	100.00%	
	BSNL	1.98%	1.10%	98.35%	0.66%	1.05%	1.95%	2.08%	98.62%	0.00%	0.00%	0	0.01%	0.00%	100.00%	100.00%	100.00%	100.00%	99.78%	98.93%	100.00%	100.00%
	RJIL	0.10%	0.32%	99.61%	0.02%	0.00%	0.15%	0.31%	99.97%	0.00%	0.06%	0	0.00%	0.00%	100.00%	100.00%	100.00%	100.00%	98.72%	98.98%	100.00%	100.00%
	VIL	0.16%	0.91%	99.47%	0.04%	0.22%	1.85%	2.50%	96.37%	0.17%	0.20%	0	0.01%	0.00%	100.00%	100.00%	100.00%	100.00%	99.90%	99.97%	100.00%	100.00%
Jammu & Kashmir	AIRTEL	0.18%	1.21%	99.71%	0.04%	0.05%	0.60%	0.94%	97.30%	0.16%	0.14%	0	0.01%	0.00%	100.00%	100.00%	100.00%	100.00%	100.00%	97.97%	100.00%	100.00%
	BSNL	1.87%	1.85%	98.58%	0.65%	1.40%	1.89%	2.63%	96.55%	0.01%	0.33%	0	0.00%	0.00%	100.00%	100.00%	100.00%	100.00%	96.76%	99.93%	100.00%	100.00%
	RJIL	0.13%	0.41%	99.70%	0.00%	0.00%	0.08%	0.29%	99.97%	0.00%	0.06%	0	0.00%	0.00%	100.00%	100.00%	100.00%	100.00%	98.56%	99.77%	100.00%	100.00%
	VIL	0.47%	1.89%	99.34%	0.17%	0.32%	1.79%	2.44%	98.18%	0.20%	0.17%	0	0.01%	0.00%	100.00%	100.00%	100.00%	100.00%	99.89%	99.98%	100.00%	100.00%

Annexure 4.1 (Contd.)

Karnataka	AIRTEL	0.06%	0.24%	99.66%	0.20%	0.17%	0.88%	1.19%	95.93%	0.17%	0.19%	0	0.03%	0.00%	99.98%	100.00%	100.00%	100.00%	91.18%	100.00%	100.00%	
	BSNL	1.32%	1.58%	98.64%	0.34%	0.33%	1.47%	1.59%	97.95%	0.72%	0.80%	0	0.00%	0.00%	99.76%	100.00%	100.00%	100.00%	95.95%	95.83%	100.00%	100.00%
	RJIL	0.04%	0.09%	99.68%	0.03%	0.00%	0.18%	0.31%	99.96%	0.00%	0.09%	0	0.00%	0.00%	100.00%	100.00%	100.00%	100.00%	98.97%	99.10%	100.00%	100.00%
	VIL	0.14%	0.87%	99.39%	0.46%	0.57%	1.89%	2.35%	98.94%	0.08%	0.18%	0	0.00%	0.00%	100.00%	100.00%	100.00%	100.00%	98.67%	100.00%	100.00%	100.00%
Kerala	AIRTEL	0.05%	0.21%	99.72%	0.22%	0.36%	1.30%	2.00%	97.17%	0.13%	0.55%	0	0.03%	0.00%	100.00%	100.00%	100.00%	100.00%	95.00%	100.00%	100.00%	100.00%
	BSNL	0.27%	0.77%	98.93%	0.19%	0.50%	1.92%	2.30%	98.43%	0.05%	0.19%	0	0.00%	0.01%	100.00%	100.00%	100.00%	100.00%	97.20%	95.66%	100.00%	100.00%
	RJIL	0.03%	0.03%	99.73%	0.01%	0.00%	0.16%	0.45%	99.96%	0.00%	0.08%	0	0.00%	0.00%	100.00%	100.00%	100.00%	100.00%	99.22%	98.17%	100.00%	100.00%
Kolkata	VIL	0.04%	0.02%	99.83%	0.21%	0.17%	0.45%	0.68%	98.93%	0.05%	0.13%	0	0.01%	0.00%	100.00%	100.00%	100.00%	100.00%	99.25%	99.78%	100.00%	100.00%
	AIRTEL	0.08%	0.00%	99.81%	0.27%	0.34%	1.81%	2.74%	96.49%	0.11%	0.26%	0	0.04%	0.00%	99.88%	100.00%	100.00%	100.00%	100.00%	96.31%	100.00%	100.00%
	BSNL	0.52%	1.07%	98.81%	0.08%	0.17%	1.48%	1.64%	96.93%	0.07%	0.25%	0	0.00%	0.00%	99.00%	100.00%	100.00%	100.00%	96.83%	97.98%	100.00%	100.00%
	RJIL	0.01%	0.02%	99.72%	0.02%	0.00%	0.07%	0.21%	99.97%	0.00%	0.06%	0	0.00%	0.00%	100.00%	100.00%	100.00%	100.00%	98.65%	98.76%	100.00%	100.00%
Madhya Pradesh	VIL	0.06%	0.21%	99.78%	0.09%	0.22%	1.20%	1.74%	97.89%	0.09%	0.14%	0	0.02%	0.00%	100.00%	100.00%	100.00%	100.00%	99.81%	99.99%	100.00%	100.00%
	AIRTEL	0.07%	0.19%	99.26%	0.20%	0.26%	1.72%	2.22%	96.88%	0.11%	0.19%	0	0.02%	0.00%	100.00%	100.00%	100.00%	100.00%	97.41%	100.00%	100.00%	100.00%
	BSNL	1.54%	1.84%	97.50%	0.43%	0.84%	1.54%	2.23%	96.87%	0.10%	0.18%	0	0.00%	0.03%	100.00%	100.00%	100.00%	100.00%	98.75%	98.60%	100.00%	100.00%
	RJIL	0.12%	0.43%	99.63%	0.01%	0.00%	0.34%	0.47%	99.95%	0.00%	0.10%	0	0.00%	0.00%	100.00%	100.00%	100.00%	100.00%	98.96%	99.16%	100.00%	100.00%
Maharashtra	VIL	0.23%	0.35%	98.99%	0.27%	0.57%	1.61%	2.04%	97.39%	0.25%	0.12%	0	0.02%	0.01%	100.00%	100.00%	100.00%	100.00%	97.75%	99.98%	100.00%	100.00%
	AIRTEL	0.10%	0.38%	99.47%	0.24%	0.31%	1.47%	1.92%	96.53%	0.10%	0.24%	0	0.03%	0.00%	99.95%	100.00%	100.00%	100.00%	100.00%	97.62%	100.00%	100.00%
	BSNL	1.54%	1.84%	97.50%	0.43%	0.84%	1.54%	2.23%	96.87%	0.10%	0.18%	0	0.02%	0.00%	100.00%	100.00%	100.00%	100.00%	98.81%	95.97%	100.00%	100.00%
	RJIL	0.19%	0.77%	99.65%	0.01%	0.00%	0.26%	0.38%	99.95%	0.00%	0.11%	0	0.00%	0.00%	100.00%	100.00%	100.00%	100.00%	98.95%	99.11%	100.00%	100.00%
Mumbai	VIL	0.13%	0.25%	99.00%	0.63%	0.96%	1.72%	2.50%	97.09%	0.26%	0.12%	0	0.01%	0.00%	100.00%	100.00%	100.00%	100.00%	99.84%	99.97%	100.00%	100.00%
	AIRTEL	0.10%	0.41%	99.42%	0.18%	0.24%	1.50%	2.04%	96.38%	0.20%	0.24%	0	0.03%	0.00%	100.00%	100.00%	100.00%	100.00%	100.00%	98.04%	100.00%	100.00%
	BSNL	0.40%	1.70%	98.01%	0.20%	0.20%	1.85%	2.17%	98.15%	NA	NA	0	0.00%	0.00%	100.00%	100.00%	100.00%	100.00%	100.00%	98.89%	100.00%	100.00%
	RJIL	0.08%	0.33%	99.63%	0.01%	0.00%	0.13%	0.25%	99.94%	0.01%	0.12%	0	0.00%	0.00%	100.00%	100.00%	100.00%	100.00%	98.76%	99.21%	100.00%	100.00%
North East	VIL	0.05%	0.07%	99.49%	0.06%	0.51%	1.88%	2.60%	98.92%	0.15%	0.22%	0	0.02%	0.00%	100.00%	100.00%	100.00%	100.00%	99.10%	99.95%	100.00%	100.00%
	AIRTEL	0.47%	0.90%	98.95%	0.22%	0.59%	1.57%	2.16%	98.36%	0.23%	0.23%	0	0.02%	0.00%	100.00%	100.00%	100.00%	100.00%	100.00%	98.08%	100.00%	100.00%
	BSNL	1.19%	0.96%	98.56%	0.60%	1.03%	1.64%	2.01%	97.23%	0.00%	0.00%	0	0.05%	0.05%	100.00%	100.00%	100.00%	100.00%	96.00%	96.80%	100.00%	100.00%
	RJIL	0.82%	1.29%	99.68%	0.01%	0.00%	0.48%	0.69%	99.95%	0.00%	0.11%	0	0.00%	0.00%	100.00%	100.00%	100.00%	100.00%	98.78%	98.77%	100.00%	100.00%
Odisha	VIL	0.95%	1.61%	99.47%	0.18%	0.52%	1.89%	2.40%	98.24%	0.13%	0.14%	0	0.00%	0.00%	100.00%	100.00%	100.00%	100.00%	99.11%	99.93%	100.00%	100.00%
	AIRTEL	0.04%	0.03%	99.02%	0.21%	0.35%	1.52%	1.65%	97.44%	0.13%	0.22%	0	0.02%	0.00%	100.00%	100.00%	100.00%	100.00%	100.00%	97.10%	100.00%	100.00%
	BSNL	1.85%	1.65%	97.39%	0.85%	1.52%	1.88%	1.98%	97.00%	0.00%	0.00%	0	0.00%	0.00%	100.00%	100.00%	100.00%	100.00%	98.12%	97.17%	100.00%	100.00%
	RJIL	0.10%	0.29%	99.64%	0.03%	0.00%	0.27%	0.37%	99.95%	0.00%	0.10%	0	0.00%	0.00%	100.00%	100.00%	100.00%	100.00%	98.91%	98.68%	100.00%	100.00%
Punjab	VIL	0.17%	0.50%	99.89%	0.04%	0.10%	1.89%	2.08%	98.97%	0.04%	0.12%	0	0.03%	0.00%	100.00%	100.00%	100.00%	100.00%	98.62%	99.99%	100.00%	100.00%
	AIRTEL	0.23%	1.77%	99.62%	0.34%	0.17%	1.47%	1.90%	95.59%	0.12%	0.26%	0	0.04%	0.00%	100.00%	100.00%	100.00%	100.00%	100.00%	97.88%	100.00%	100.00%
	BSNL	1.26%	1.95%	96.37%	0.69%	1.63%	1.90%	1.92%	96.50%	0.00%	0.00%	0	0.00%	0.00%	100.00%	100.00%	100.00%	100.00%	95.78%	99.93%	100.00%	100.00%
	RJIL	0.04%	0.06%	99.64%	0.01%	0.00%	0.08%	0.32%	99.96%	0.00%	0.07%	0	0.00%	0.00%	100.00%	100.00%	100.00%	100.00%	98.70%	98.92%	100.00%	100.00%
Rajasthan	VIL	0.04%	0.17%	99.78%	0.33%	0.22%	0.45%	0.90%	99.31%	0.09%	0.19%	0	0.00%	0.00%	100.00%	100.00%	100.00%	100.00%	99.96%	99.99%	100.00%	100.00%
	AIRTEL	0.67%	0.96%	99.38%	0.19%	0.35%	1.00%	1.00%	98.08%	0.20%	0.17%	0	0.03%	0.00%	100.00%	100.00%	100.00%	100.00%	100.00%	97.53%	100.00%	100.00%
	BSNL	0.45%	1.50%	98.60%	0.38%	0.30%	1.83%	2.17%	98.09%	0.00%	0.02%	0	0.02%	0.01%	100.00%	100.00%	100.00%	100.00%	99.56%	97.99%	100.00%	100.00%
	RJIL	0.08%	0.25%	99.69%	0.03%	0.00%	0.26%	0.39%	99.96%	0.00%	0.08%	0	0.00%	0.00%	100.00%	100.00%	100.00%	100.00%	99.03%	99.11%	100.00%	100.00%
Tamil Nadu including Chennai	VIL	0.15%	1.93%	99.44%	0.28%	0.36%	1.97%	2.46%	97.32%	0.15%	0.23%	0	0.01%	0.00%	100.00%	100.00%	100.00%	100.00%	99.35%	99.99%	100.00%	100.00%
	AIRTEL	0.51%	1.27%	99.64%	0.36%	0.33%	1.17%	1.61%	97.35%	0.19%	0.15%	0	0.04%	0.00%	100.00%	100.00%	100.00%	100.00%	100.00%	95.40%	100.00%	100.00%
	BSNL	0.80%	1.84%	99.32%	0.75%	1.17%	1.54%	2.30%	98.59%	0.00%	0.00%	0	0.00%	0.00%	100.00%	100.00%	100.00%	100.00%	98.07%	93.35%	100.00%	100.00%
	RJIL	0.08%	0.32%	99.72%	0.01%	0.00%	0.17%	0.30%	99.96%	0.00%	0.09%	0	0.00%	0.00%	100.00%	100.00%	100.00%	100.00%	98.92%	97.41%	100.00%	100.00%
Uttar Pradesh (East)	VIL	0.32%	1.84%	99.28%	0.78%	0.70%	1.49%	2.04%	98.30%	0.08%	0.15%	0	0.02%	0.00%	100.00%	100.00%	100.00%	100.00%	98.66%	99.98%	100.00%	100.00%
	AIRTEL	0.24%	1.56%	99.30%	0.44%	0.61%	1.07%	1.28%	95.77%	0.02%	0.47%	0	0.03%	0.00%	100.00%	100.00%	100.00%	100.00%	100.00%	97.59%	100.00%	100.00%
	BSNL	0.97%	1.42%	99.35%	0.38%	0.36%	1.82%	2.75%	98.17%	0.00%	0.00%	0	0.00%	0.00%	100.00%	100.00%	100.00%	100.00%	95.94%	99.39%	100.00%	100.00%
	RJIL	0.14%	0.56%	99.64%	0.01%	0.00%	0.37%	0.53%	99.96%	0.00%	0.09%	0	0.00%	0.00%	100.00%	100.00%	100.00%	100.00%	98.14%	98.76%	100.00%	100.00%
Uttar Pradesh (West)	VIL	0.13%	0.50%	99.37%	0.20%	0.62%	1.59%	2.54%	97.24%	0.14%	0.27%	0	0.01%	0.00%	100.00%	100.00%	100.00%	100.00%	99.35%	99.93%	100.00%	100.00%
	AIRTEL	0.14%	0.40%	99.76%	0.17%	0.14%	1.45%	1.97%	95.47%	0.18%	0.14%	0	0.04%	0.00%	100.00%	100.00%	100.00%	100.00%	100.00%	97.28%	100.00%	100.00%
	BSNL	1.18%	1.69%	99.42%	0.74%	1.15%	1.40%	1.97%	97.64%	0.15%	0.41%	0	0.00%	0.01%	100.00%	100.00%	100.00%	100.00%	99.14%	98.86%	100.00%	100.00%
	RJIL	0.09%	0.33%	99.69%	0.02%	0.00%	0.28%	0.45%	99.96%	0.00%	0.07%	0	0.00%	0.00%	100.00%	100.00%	100.00%	100.00%	99.04%	98.79%	100.00%	100.00%
West Bengal																						

Annexure 4.2 : Performance of QoS Parameters for Basic (Wire-line) Service

LSA Name	TSP Name	Faults incidences (No. of faults/100 Subs./month)	Fault Repair				Mean Time to Repair (MTTR)	POI Point of Interconnection (POI) Congestion (No. of PIs not meeting benchmark)	Metering and Billing					Response time to the customer for assistance		Termination / closure of service	
			faults repaired by next working day - Urban	faults repaired within 5 days - Urban	faults repaired by next working day - Rural and hilly areas	faults repaired within 7 days - Rural and hilly areas			Metering and Billing Credibility - Postpaid	Metering and Billing Credibility - Prepaid	Resolution of billing/ changing/ validity complaints within 4 weeks	Resolution of billing/ changing/ validity complaints within 6 weeks	Period of applying credit/ waiver/ adjustment to customer's account from the date of resolution of complaints- within 1 week of	Accessibility of call center/ customer care	Percentage of calls answered by the operators (voice to voice) within ninety seconds	Termination / Closure of service	Time taken for Refund of deposits after closures- within 60 days
			<= 7	>=85%	100%	>=75%			100%	< 10 Hrs	< 0.5%	< 0.1%	< 0.1%	98% within 4 weeks	100% within 6 weeks	100% within 1 week of resolution of complaint	>= 95%
Andhra Pradesh	AIRTEL	0.53	88.93%	100.00%	100.00%	100.00%	9.89	0	0.00%	0.00%	100.00%	100.00%	100.00%	100.00%	98.66%	100.00%	100.00%
	APSPFL	5	91.85%	100.00%	83.15%	100.00%	8.57	0	0.00%	0.00%	99.45%	100.00%	100.00%	98.00%	100.00%	100.00%	100.00%
	BSNL	4	97.00%	100.00%	97.00%	100.00%	5	0	0.00%	0.00%	100.00%	100.00%	100.00%	79.17%	66.45%	100.00%	100.00%
	RJIL	0	100.00%	100.00%	100.00%	100.00%	0	0	0.00%	0.00%	NA	NA	NA	97.01%	99.65%	100.00%	100.00%
	TATA	2.02	88.80%	100.00%	100.00%	100.00%	1.78	0	0.00%	NA	100.00%	100.00%	100.00%	99.31%	99.06%	100.00%	96.94%
Assam	VIL	0.11	100.00%	100.00%	NA	NA	2.18	0	NA	NA	NA	NA	NA	100.00%	100.00%	100.00%	NA
	AIRTEL	0	100.00%	100.00%	100.00%	100.00%	0	0	0.00%	0.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
	BSNL	4	95.00%	100.00%	87.00%	100.00%	4	0	0.00%	0.00%	100.00%	100.00%	100.00%	99.02%	99.02%	100.00%	100.00%
	RJIL	0	100.00%	100.00%	100.00%	100.00%	0	0	0.00%	0.00%	NA	NA	NA	98.41%	100.00%	100.00%	100.00%
	VIL	0.52	100.00%	100.00%	NA	NA	6.34	0	NA	NA	NA	NA	NA	100.00%	100.00%	100.00%	NA
Bihar	AIRTEL	0.56	92.57%	100.00%	100.00%	100.00%	8.04	0	0.00%	0.00%	100.00%	100.00%	100.00%	100.00%	96.10%	100.00%	100.00%
	BSNL	5	94.00%	100.00%	92.00%	100.00%	4	0	0.00%	0.00%	100.00%	100.00%	100.00%	99.00%	98.52%	100.00%	100.00%
	RJIL	0	100.00%	100.00%	100.00%	100.00%	0	0	0.00%	0.00%	NA	NA	NA	97.84%	99.70%	100.00%	100.00%
	TATA	0.02	100.00%	100.00%	100.00%	100.00%	1.5	0	0.00%	NA	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
	VIL	0.45	100.00%	100.00%	NA	NA	2.14	0	NA	NA	NA	NA	NA	100.00%	100.00%	100.00%	NA
Delhi	AIRTEL	0.46	92.80%	100.00%	100.00%	100.00%	9.85	0	0.00%	0.00%	100.00%	100.00%	100.00%	100.00%	99.37%	100.00%	100.00%
	MTNL	1.15	80.85%	99.02%	NA	NA	5.12	0	0.00%	NA	100.00%	100.00%	100.00%	99.98%	99.00%	100.00%	100.00%
	RJIL	0	100.00%	100.00%	100.00%	100.00%	0	0	0.00%	0.00%	NA	NA	NA	97.79%	99.84%	100.00%	100.00%
	TATA	1.99	100.00%	100.00%	100.00%	100.00%	1.86	0	0.00%	NA	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
	VIL	0.18	100.00%	100.00%	NA	NA	2.43	0	NA	NA	NA	NA	NA	100.00%	100.00%	100.00%	NA
Gujarat	AIRTEL	0.09	91.47%	100.00%	100.00%	100.00%	8.27	0	0.00%	0.00%	100.00%	100.00%	100.00%	100.00%	99.15%	100.00%	100.00%
	BSNL	4	96.00%	100.00%	88.00%	100.00%	4	0	0.00%	0.00%	100.00%	100.00%	100.00%	97.31%	97.21%	100.00%	100.00%
	RJIL	0	100.00%	100.00%	100.00%	100.00%	0	0	0.00%	0.00%	NA	NA	NA	97.87%	99.21%	100.00%	100.00%
	TATA	0.67	95.49%	100.00%	100.00%	100.00%	2.22	0	0.00%	NA	100.00%	100.00%	100.00%	99.43%	99.38%	100.00%	100.00%
	VIL	0.08	100.00%	100.00%	NA	NA	3.8	0	NA	NA	NA	NA	NA	100.00%	100.00%	100.00%	NA
Haryana	AIRTEL	0.3	93.17%	100.00%	100.00%	100.00%	6.79	0	0.00%	0.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
	BSNL	4	90.00%	100.00%	91.00%	100.00%	5	0	0.01%	0.00%	100.00%	100.00%	100.00%	96.90%	96.90%	100.00%	100.00%
	RJIL	0	100.00%	100.00%	100.00%	100.00%	0	0	0.00%	0.00%	NA	NA	NA	100.00%	97.30%	100.00%	100.00%
	TATA	0	100.00%	100.00%	100.00%	100.00%	0	0	0.00%	NA	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
	VIL	1.27	100.00%	100.00%	NA	NA	1.2	0	NA	NA	NA	NA	NA	100.00%	100.00%	NA	NA
Himachal Pradesh	AIRTEL	0.51	90.76%	100.00%	100.00%	100.00%	7.49	0	0.00%	0.00%	100.00%	100.00%	100.00%	100.00%	96.00%	100.00%	100.00%
	BSNL	5	92.00%	100.00%	94.00%	100.00%	6	0	0.00%	0.00%	98.93%	100.00%	100.00%	97.10%	97.10%	100.00%	100.00%
	RJIL	0	100.00%	100.00%	100.00%	100.00%	0	0	0.00%	0.00%	NA	NA	NA	97.37%	100.00%	100.00%	100.00%
	TATA	0	100.00%	100.00%	100.00%	100.00%	0	0	0.00%	NA	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
	VIL	0	100.00%	100.00%	NA	NA	0	0	NA	NA	NA	NA	NA	100.00%	100.00%	NA	NA
Jammu & Kashmir	AIRTEL	0.34	90.53%	100.00%	100.00%	100.00%	8.59	0	0.00%	0.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
	BSNL	4	97.00%	100.00%	95.00%	100.00%	7	0	0.01%	0.00%	98.00%	100.00%	100.00%	97.46%	96.78%	100.00%	100.00%
	RJIL	0	100.00%	100.00%	100.00%	100.00%	0	0	0.00%	0.00%	NA	NA	NA	97.32%	100.00%	100.00%	100.00%
	VIL	0	100.00%	100.00%	NA	NA	0	0	NA	NA	NA	NA	NA	100.00%	100.00%	NA	NA
	AIRTEL	0.61	89.24%	100.00%	100.00%	100.00%	9.79	0	0.00%	0.00%	100.00%	100.00%	100.00%	100.00%	98.61%	100.00%	100.00%
Karnataka	BSNL	7	98.00%	100.00%	95.00%	100.00%	8	0	0.09%	0.00%	98.00%	100.00%	100.00%	73.48%	56.05%	100.00%	100.00%
	RJIL	0	100.00%	100.00%	100.00%	100.00%	0	0	0.00%	0.00%	NA	NA	NA	97.58%	100.00%	100.00%	100.00%
	TATA	0.04	100.00%	100.00%	100.00%	100.00%	2.34	0	0.00%	NA	100.00%	100.00%	100.00%	99.25%	100.00%	100.00%	100.00%
	VIL	0.09	100.00%	100.00%	NA	NA	3.4	0	NA	NA	NA	NA	NA	100.00%	100.00%	100.00%	NA

Annexure 4.2 (Contd.)

Kerala	AIRTEL	0.53	88.69%	100.00%	100.00%	100.00%	9.89	0	0.00%	0.00%	100.00%	100.00%	100.00%	100.00%	96.69%	100.00%	100.00%	
	BSNL	5	92.00%	100.00%	92.00%	100.00%	7	0	0.02%	0.00%	100.00%	100.00%	100.00%	100.00%	54.79%	33.64%	100.00%	100.00%
	RJIL	0	100.00%	100.00%	100.00%	100.00%	0	0	0.00%	0.00%	NA	NA	NA	NA	97.44%	99.12%	100.00%	100.00%
	TATA	0	100.00%	100.00%	100.00%	100.00%	0	0	0.00%	NA	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
Kolkata	VIL	0.4	100.00%	100.00%	NA	NA	3.2	0	NA	NA	NA	NA	NA	NA	100.00%	100.00%	100.00%	NA
	AIRTEL	0.32	92.94%	100.00%	100.00%	100.00%	9.4	0	0.00%	0.00%	100.00%	100.00%	100.00%	100.00%	100.00%	99.30%	100.00%	100.00%
	BSNL	6	90.00%	100.00%	NA	NA	7	0	0.00%	0.00%	99.00%	100.00%	100.00%	100.00%	97.14%	97.14%	100.00%	100.00%
	RJIL	0	100.00%	100.00%	100.00%	100.00%	0	0	0.00%	0.00%	NA	NA	NA	NA	97.22%	100.00%	100.00%	100.00%
Maharashtra	TATA	0.87	99.09%	100.00%	100.00%	100.00%	0.78	0	0.00%	NA	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
	VIL	0.19	100.00%	100.00%	NA	NA	5.37	0	NA	NA	NA	NA	NA	100.00%	100.00%	100.00%	100.00%	NA
	AIRTEL	0.56	85.03%	100.00%	100.00%	100.00%	0.75	0	0.00%	0.00%	100.00%	100.00%	100.00%	100.00%	100.00%	99.49%	100.00%	100.00%
	BSNL	6	90.00%	100.00%	89.00%	100.00%	6	0	0.06%	0.00%	100.00%	100.00%	100.00%	100.00%	98.72%	98.43%	100.00%	100.00%
Madhya Pradesh	RJIL	0	100.00%	100.00%	100.00%	100.00%	0	0	0.00%	0.00%	NA	NA	NA	NA	100.00%	100.00%	100.00%	100.00%
	TATA	0.21	100.00%	100.00%	100.00%	100.00%	0.69	0	0.00%	NA	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
	VIL	0.05	100.00%	100.00%	NA	NA	1.32	0	NA	NA	NA	NA	NA	100.00%	100.00%	100.00%	100.00%	NA
	AIRTEL	0.07	90.36%	100.00%	100.00%	100.00%	7.67	0	0.00%	0.00%	100.00%	100.00%	100.00%	100.00%	100.00%	98.82%	100.00%	100.00%
Maharashtra	BSNL	5	86.00%	100.00%	92.00%	100.00%	8	0	0.01%	0.00%	98.00%	100.00%	100.00%	100.00%	97.35%	96.81%	100.00%	100.00%
	RJIL	0	100.00%	100.00%	100.00%	100.00%	0	0	0.00%	0.00%	NA	NA	NA	NA	99.07%	100.00%	100.00%	100.00%
	TATA	1.92	95.66%	100.00%	100.00%	100.00%	2.25	0	0.00%	NA	100.00%	100.00%	100.00%	100.00%	98.98%	99.25%	100.00%	100.00%
	VIL	0.41	100.00%	100.00%	NA	NA	4.56	0	NA	NA	NA	NA	NA	100.00%	100.00%	100.00%	100.00%	NA
Mumbai	AIRTEL	0.06	90.00%	100.00%	100.00%	100.00%	8.55	0	0.00%	0.00%	100.00%	100.00%	100.00%	100.00%	100.00%	99.79%	100.00%	100.00%
	MTNL	1.8	40.10%	59.10%	0.00%	89.00%	112.34	0	0.00%	NA	99.40%	100.00%	100.00%	100.00%	99.95%	95.54%	98.42%	50.27%
	RJIL	0	100.00%	100.00%	100.00%	100.00%	0	0	0.00%	0.00%	NA	NA	NA	NA	96.89%	100.00%	100.00%	100.00%
	TATA	2.02	90.54%	100.00%	100.00%	100.00%	2.38	0	0.00%	NA	100.00%	100.00%	100.00%	100.00%	99.23%	98.91%	100.00%	100.00%
North East	VIL	0.08	100.00%	100.00%	NA	NA	2.6	0	NA	NA	NA	NA	NA	100.00%	100.00%	100.00%	100.00%	NA
	BSNL	4	94.00%	100.00%	97.00%	100.00%	7	0	0.00%	0.00%	100.00%	100.00%	100.00%	100.00%	92.59%	92.59%	100.00%	100.00%
	RJIL	0	100.00%	100.00%	100.00%	100.00%	0	0	0.00%	0.00%	NA	NA	NA	NA	100.00%	100.00%	100.00%	100.00%
	VIL	0	100.00%	100.00%	NA	NA	0	0	NA	NA	NA	NA	NA	NA	100.00%	100.00%	100.00%	NA
Odisha	AIRTEL	0	100.00%	100.00%	100.00%	100.00%	0	0	0.00%	0.00%	100.00%	100.00%	100.00%	100.00%	100.00%	99.38%	100.00%	100.00%
	BSNL	3	93.00%	100.00%	96.00%	100.00%	7	0	0.09%	0.00%	99.00%	100.00%	100.00%	100.00%	96.92%	96.47%	100.00%	100.00%
	RJIL	0	100.00%	100.00%	100.00%	100.00%	0	0	0.00%	0.00%	NA	NA	NA	NA	97.59%	100.00%	100.00%	100.00%
	TATA	1.57	100.00%	100.00%	100.00%	100.00%	1.21	0	0.00%	NA	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
Punjab	VIL	0.23	100.00%	100.00%	NA	NA	1.46	0	NA	NA	NA	NA	NA	100.00%	100.00%	100.00%	100.00%	NA
	AIRTEL	0.87	88.68%	100.00%	100.00%	100.00%	9.98	0	0.00%	0.00%	100.00%	100.00%	100.00%	100.00%	100.00%	99.40%	100.00%	100.00%
	BSNL	6	90.00%	100.00%	90.00%	100.00%	8	0	0.07%	0.00%	98.00%	100.00%	100.00%	100.00%	96.72%	96.72%	100.00%	100.00%
	QTL	6.2	91.00%	100.00%	100.00%	100.00%	8.24	0	0.01%	0.00%	100.00%	100.00%	100.00%	100.00%	98.23%	98.87%	100.00%	100.00%
Rajasthan	RJIL	0	100.00%	100.00%	100.00%	100.00%	0	0	0.00%	0.00%	NA	NA	NA	NA	96.64%	99.35%	100.00%	100.00%
	TATA	0.06	100.00%	100.00%	100.00%	100.00%	0.57	0	0.00%	NA	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
	VIL	0.31	100.00%	100.00%	NA	NA	1.3	0	NA	NA	NA	NA	NA	100.00%	100.00%	100.00%	100.00%	NA
	VMIPL	0	100.00%	100.00%	NA	NA	0	NA	NA	NA	NA	NA	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
Tamil Nadu including Chennai	AIRTEL	0.36	86.18%	100.00%	100.00%	100.00%	5.18	0	0.00%	0.00%	100.00%	100.00%	100.00%	100.00%	100.00%	99.14%	100.00%	100.00%
	BSNL	5	95.00%	100.00%	92.00%	100.00%	6	0	0.03%	0.00%	98.50%	100.00%	100.00%	100.00%	96.91%	96.82%	100.00%	100.00%
	RJIL	0	100.00%	100.00%	100.00%	100.00%	0	0	0.00%	0.00%	NA	NA	NA	NA	98.94%	100.00%	100.00%	100.00%
	TATA	2	100.00%	100.00%	100.00%	100.00%	1.84	0	0.00%	NA	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
Uttar Pradesh (East)	VIL	0.14	100.00%	100.00%	NA	NA	2.47	0	NA	NA	NA	NA	NA	100.00%	100.00%	100.00%	100.00%	NA
	AIRTEL	0.81	88.50%	100.00%	100.00%	100.00%	9.9	0	0.00%	0.00%	100.00%	100.00%	100.00%	100.00%	100.00%	97.87%	100.00%	100.00%
	BSNL	5	95.00%	100.00%	91.00%	100.00%	6	0	0.04%	0.00%	100.00%	100.00%	100.00%	100.00%	56.78%	37.11%	100.00%	100.00%
	RJIL	0	100.00%	100.00%	100.00%	100.00%	0	0	0.00%	0.00%	NA	NA	NA	NA	96.19%	99.73%	100.00%	100.00%
Uttar Pradesh (West)	TATA	0.04	100.00%	100.00%	100.00%	100.00%	4.26	0	0.00%	NA	100.00%	100.00%	100.00%	100.00%	97.56%	97.26%	100.00%	100.00%
	VIL	0.53	100.00%	100.00%	NA	NA	5.44	0	NA	NA	NA	NA	NA	100.00%	100.00%	100.00%	100.00%	NA
	AIRTEL	0.65	92.81%	100.00%	100.00%	100.00%	8.41	0	0.00%	0.00%	100.00%	100.00%	100.00%	100.00%	100.00%	99.21%	100.00%	100.00%
	BSNL	5	86.00%	100.00%	84.00%	100.00%	6	0	0.01%	0.00%	100.00%	100.00%	100.00%	100.00%	98.70%	98.70%	100.00%	100.00%
West Bengal	RJIL	0	100.00%	100.00%	100.00%	100.00%	0	0	0.00%	0.00%	NA	NA	NA	NA	98.35%	100.00%	100.00%	100.00%
	TATA	0.3	100.00%	100.00%	100.00%	100.00%	0.8	0	0.00%	NA	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
	VIL	0.15	100.00%	100.00%	NA	NA	2.37	0	NA	NA	NA	NA	NA	100.00%	100.00%	100.00%	100.00%	NA
	AIRTEL	0.67	93.95%	100.00%	100.00%	100.00%	2.48	0	0.00%	0.00%	100.00%	100.00%	100.00%	100.00%	100.00%	99.06%	100.00%	100.00%
West Bengal	BSNL	6	93.00%	100.00%	93.00%	100.00%	6	0	0.08%	0.00%	99.00%	100.00%	100.00%	100.00%	97.29%	97.17%	100.00%	100.00%
	RJIL	0	100.00%	100.00%	100.00%	100.00%	0	0	0.00%	0.00%	NA	NA	NA	NA	98.13%	99.64%	100.00%	100.00%
	TATA	1.28	100.00%	100.00%	100.00%	100.00%	2.72	0	0.00%	NA	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
	VIL	1.05	100.00%	100.00%	NA	NA	2.48	0	NA	NA	NA	NA	NA	100.00%	100.00%	100.00%	100.00%	NA
West Bengal	AIRTEL	0	100.00%	100.00%	100.00%	100.00%	0	0	0.00%	0.00%	100.00%	100.00%	100.00%	100.00%	100.00%	98.88%	100.00%	100.00%
	BSNL	2	89.00%	100.00%	90.00%	100.00%	5	0	0.02%	0.00%	98.00%	100.00%	100.00%	100.00%	96.14%	95.87%	100.00%	100.00%
	RJIL	0	100.00%	100.00%	100.00%	100.00%	0	0	0.00%	0.00%	NA	NA	NA	NA	98.61%	100.00%	100.00%	100.00%
	TATA	0	100.00%	100.00%	100.00%	100.00%	0	0	0.00%	NA	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
West Bengal	VIL	1.11	10															

Annexure 4.3: Quality of Service Performance of Broadband (wireline) Service Providers

S.No.	Service Provider	LSA	Service Provisioning/ Activation time	Fault Repair/ Restoration Time			Billing Performance			Response Time to the Customer for assistance		Bandwidth utilisation/ throughput				Service availability /uptime (for all users) in %age	Packet loss (for wired broadband access) in %age	Network latency (for wired broadband access)		
			%age of connections provided within 15 days of registration of demand	% of faults repaired by next working day (>90%)	% of faults repaired within 3 working day	%age of bills disputed	%age of billing complaints resolved within 4 weeks	%age of cases to whom refund of deposits is made within 60 days of closures	%age of calls answered by operator (Voice to voice) within 60 sec	%age of calls answered by operator (Voice to voice) within 90 sec	No. of Intra network links having Bandwidth utilisation >90% during peak hours (TCBH)	No. of Upstream links for International connectivity having bandwidth utilisation >90% during peak hours (TCBH)	% International bandwidth utilization during peak hours (TCBH) (Enclose MRTG) <90%	Broadband Connection Speed available (download) from ISP node to user	User reference point at POP/ISP Gateway node to (IGSP/NIXI)			User reference point at ISP Gateway node to International nearest NAP port abroad (terrestrial)	User reference point at ISP Gateway node to International nearest NAP port abroad (satellite)	
			100%	>90%	=>99%	<2%	100% within 4 weeks	100% within 60 days	>60%	>80%	0	0	<90%	>80%	>98%			<1%	<120 ms	<350 ms
1	ADN Broadband Pvt. Ltd.	Delhi	100.00	99.31	100.00	0.00	100.00	100.00	100.00	100.00	0.00	0.00	67.04	90.00	99.68	0.50	2.00	150.00	0.00	
2	Aerpace Communications Pvt. Ltd.	Maharashtra Mumbai	100.00	92.00	100.00	0.00	100.00	100.00	83.00	92.00	0.00	0.00	88.00	99.00	100.00	0.98	1.00	225.00	265.00	
3	Airfiber Networks Pvt. Ltd.	Karnataka Tamilnadu	100.00	95.93	99.90	0.00	100.00	100.00	91.50	99.00	0.00	0.00	72.70	99.00	100.00	0.50	23.00	246.00	0.00	
4	Airnet Cable and Datacom Pvt.Ltd.	Maharashtra Mumbai	100.00	97.03	99.58	0.00	100.00	100.00	99.94	100.00	0.00	0.00	4.02	100.00	100.00	0.00	2.00	220.00	NA	
5	Alliance Broadband Services Pvt. Ltd.	All India	100.00	91.15	100.00	0.00	100.00	100.00	83.33	100.00	0.00	0.00	59.28	98.13	99.46	0.00	2.00	4.00	1.00	
6	Andhra Pradesh State Fiber Net Limited	Andhra Pradesh	100.00	94.22	100.00	0.00	100.00	100.00	83.69	94.16	0.00	0.00	75.47	89.02	100.00	0.48	87.00	215.00	415.00	
7	Angel Air Network Solutions Pvt. Ltd.	Haryana Punjab Rajasthan	100.00	100.00	100.00	0.00	100.00	100.00	100.00	100.00	0.00	0.00	81.00	90.00	100.00	0.00	20.00	25.00	40.00	
8	ANI Broadband Service Pvt. Ltd.	All India	100.00	99.00	100.00	0.00	100.00	100.00	98.00	100.00	0.00	0.00	85.00	100.00	99.00	0.40	20.00	288.00	0.00	
9	Antariksh Softech Pvt. Ltd.	Maharashtra Mumbai	100.00	92.00	99.00	0.00	100.00	100.00	87.00	89.33	0.00	0.00	0.00	90.00	99.00	0.10	24.00	0.00	0.00	
10	Apple Broadband Services Pvt. Ltd.	Andhra Pradesh	100.00	91.47	100.00	0.00	100.00	100.00	83.67	100.00	0.00	0.00	87.00	82.00	98.89	0.00	3.00	22.00	0.00	
11	Asianet Satellite Communications Ltd.	All India	100.00	90.53	99.91	0.65	100.00	100.00	61.37	81.36	0.00	0.00	70.52	92.00	99.87	0.82	56.00	229.00	0.00	
12	AT Broadband Pvt. Ltd.*	Tamilnadu	100.00	99.00	99.00	0.00	100.00	100.00	80.00	90.00	0.00	0.00	0.00	99.00	100.00	0.30	0.00	0.00	0.00	
13	Atria Convergence Technologies Ltd.	All India	100.00	91.11	96.86	0.95	100.00	100.00	61.00	76.00	0.00	0.00	36.77	97.00	99.77	0.02	1.00	25.00	0.00	
14	Bharat Sanchar Nigam Ltd.	All India	100.00	94.85	99.76	0.16	100.00	100.00	85.42	88.21	0.00	0.00	59.60	94.16	99.59	0.60	49.70	143.80	NA	
15	Bharti Airtel Ltd.	All India	100.00	92.46	99.80	0.00	100.00	100.00	97.40	98.73	0.00	0.00	42.22	100.00	99.90	0.00	49.82	48.63	0.00	
16	Bluelotus Support Services Pvt.Ltd. (formerly Limra)	All India	100.00	99.00	100.00	0.02	100.00	100.00	90.00	100.00	0.00	0.00	0.00	98.50	99.46	0.01	24.00	235.33	0.00	
17	Candor Infosolution Pvt. Ltd.	Bihar Delhi Haryana	100.00	99.00	100.00	0.33	100.00	100.00	100.00	100.00	0.00	0.00	89.00	90.00	100.00	0.00	90.00	250.00	350.00	
18	City Online Services Ltd	Andhra Pradesh Karnataka	100.00	99.00	99.00	0.00	100.00	100.00	98.00	99.00	0.00	0.00	59.28	99.00	99.86	0.30	15.00	238.00	0.00	
19	D-ATUM Vilcom Pvt. Ltd.	All India	100.00	100.00	100.00	0.00	100.00	100.00	95.00	100.00	0.00	0.00	0.00	98.00	100.00	0.10	20.00	0.00	0.00	
20	DEN Broadband Limited	All India	100.00	94.74	99.46	0.00	100.00	100.00	83.65	89.99	0.00	0.00	72.67	93.00	99.86	0.62	80.00	329.00	0.00	
21	Deshkal Network Pvt. Ltd.*	Karnataka	100.00	95.00	99.00	0.00	100.00	100.00	90.00	95.00	0.00	0.00	89.00	85.00	99.21	0.50	5.00	250.00	0.00	
22	Digital Network Associates Pvt. Ltd.	Maharashtra Mumbai	100.00	95.58	99.58	0.00	100.00	100.00	80.93	91.85	0.00	0.00	80.00	83.00	99.86	0.20	4.00	255.00	600.00	
23	DL GTPL Broadband Pvt. Ltd.	Gujarat Maharashtra	100.00	94.00	100.00	0.00	100.00	100.00	77.00	88.00	0.00	0.00	85.60	90.00	99.55	0.00	15.00	300.00	0.00	
24	DNA Infotel Pvt Ltd	Maharashtra	100.00	94.04	99.59	0.00	100.00	100.00	80.64	91.45	0.00	0.00	80.00	83.00	99.86	0.90	4.00	255.00	600.00	
25	ESTO BROADBAND Pvt. Ltd.	All India	100.00	99.00	100.00	0.00	100.00	100.00	99.00	100.00	0.00	0.00	79.37	90.00	99.17	0.00	40.00	100.00	720.00	

Annexure 4.3 (Contd.)

26	Ethernet Xpress(I) Pvt. Ltd.	Maharashtra	100.00	97.76	99.80	0.11	100.00	100.00	89.67	94.00	0.00	0.00	20.00	99.00	100.00	0.10	30.00	300.00	650.00
27	Excell Media Pvt. Ltd.	Andhra Pradesh	100.00	92.60	99.57	0.00	100.00	100.00	95.65	97.24	0.00	0.00	59.23	97.90	99.68	0.50	6.33	300.00	0.00
		Karnataka	100.00	100.00	100.00	0.00	100.00	100.00	100.00	100.00	0.00	0.00	0.00	100.00	100.00	0.00	0.00	0.00	0.00
28	Excitel Broadband Private Limited	All India	100.00	91.40	99.67	0.00	100.00	100.00	63.20	83.21	0.00	0.00	77.97	100.00	99.86	0.00	4.00	199.00	0.00
29	Extranet Supports Pvt. Ltd. (earlier Dwan Supp	All India	100.00	95.67	100.00	0.00	100.00	100.00	91.00	95.33	0.00	0.00	85.83	95.33	99.86	0.04	20.00	168.00	460.00
30	Fibervalley Communications Pvt. Ltd.	Gujarat	100.00	90.13	99.21	0.00	100.00	100.00	99.77	100.00	0.00	0.00	78.06	98.99	99.86	0.41	80.00	275.00	0.00
31	Five Internet Solutions Pvt. Ltd.	Haryana	100.00	99.00	99.00	0.00	100.00	100.00	86.00	93.66	0.00	0.00	86.00	95.00	99.35	0.00	30.00	100.00	680.00
		Punjab	100.00	99.00	99.00	0.00	100.00	100.00	86.00	93.66	0.00	0.00	72.00	95.00	99.35	0.00	30.00	100.00	680.00
32	Five Net Service Provider Pvt. Ltd.	Madhya Pradesh	100.00	99.00	99.00	0.00	100.00	100.00	86.00	93.66	0.00	0.00	72.00	95.00	99.35	0.00	30.00	100.00	680.00
33	Five Network Solution (India) Ltd.	All India	100.00	99.50	100.00	0.00	100.00	100.00	100.00	100.00	0.00	0.00	38.00	100.00	99.86	0.60	2.60	242.00	0.00
34	Fusionnet Web Services Pvt. Ltd.	All India	100.00	97.75	99.80	0.00	100.00	100.00	97.20	98.00	0.00	0.00	69.91	100.00	100.00	0.00	2.00	250.00	0.00
35	Gazon Communications India Limited	Maharashtra	100.00	98.50	100.00	0.00	100.00	100.00	95.90	99.90	0.00	0.00	52.00	98.00	99.50	0.95	2.00	0.00	NA
36	Genstar Network Solutions Pvt. Ltd.	Mumbai	100.00	99.00	100.00	0.00	100.00	100.00	83.00	87.00	0.00	0.00	82.00	99.00	99.41	0.00	1.00	47.00	80.00
37	GTPL Broadband Pvt. Ltd.	All India	100.00	93.34	99.35	0.00	100.00	100.00	96.85	98.33	0.00	0.00	44.62	94.00	99.13	0.00	11.00	300.00	0.00
38	GTPL KCBPL Broadband Private Limited	Kolkata	100.00	99.36	100.00	0.00	100.00	100.00	93.14	93.73	0.00	0.00	78.67	98.00	100.00	0.00	10.00	250.00	310.00
		Odisha	100.00	100.00	100.00	0.00	100.00	100.00	95.66	96.93	0.00	0.00	74.04	98.74	100.00	0.00	10.00	250.00	310.00
		West Bengal	100.00	98.42	100.00	0.00	100.00	100.00	94.95	95.62	0.00	0.00	77.47	98.60	100.00	0.00	10.00	250.00	310.00
39	Hathway Cable & Datacom Pvt. Ltd.	All India	100.00	92.01	99.20	1.01	100.00	100.00	84.16	89.82	0.00	0.00	76.99	90.00	99.73	0.23	7.33	57.00	0.00
40	Honesty Net Solutions (I) Pvt Ltd	All India	100.00	93.33	100.00	0.00	100.00	100.00	68.00	100.00	0.00	0.00	0.00	95.00	99.81	0.02	0.00	66.00	0.00
41	Honeycomb Telnet Private Limited	All India	100.00	91.00	99.00	0.00	100.00	100.00	87.67	91.33	0.00	0.00	0.00	90.00	99.00	0.10	24.00	0.00	0.00
42	HYOSEC Solutions Pvt. Ltd.*	All India	100.00	98.00	100.00	0.02	100.00	100.00	100.00	100.00	0.00	0.00	10.00	100.00	100.00	0.30	21.00	80.00	100.00
43	Indinet Service Pvt. Ltd	All India	100.00	93.33	100.00	0.00	100.00	100.00	83.00	89.67	0.00	0.00	86.08	94.67	99.09	0.50	56.00	243.67	NA
44	Infocus Networks Pvt. Ltd.	Mumbai	100.00	96.71	100.00	0.00	100.00	100.00	95.90	99.90	0.00	0.00	79.00	97.00	99.33	0.95	1.00	0.00	NA
45	Instanet Technologies Pvt. Ltd.	Maharashtra	100.00	97.50	100.00	0.09	100.00	100.00	78.32	88.53	0.00	0.00	63.00	90.00	100.00	0.00	4.00	255.00	0.00
46	Intech Online Pvt. Ltd.	Maharashtra	100.00	90.37	99.28	1.34	100.00	100.00	99.43	99.53	0.00	0.00	29.88	93.33	99.86	0.02	15.00	89.33	450.00
		Mumbai	100.00	90.98	99.39	0.49	100.00	100.00	99.46	99.56	0.00	0.00	31.11	93.33	99.86	0.02	1.00	76.00	450.00
47	Intermedia Cable Communication Pvt Ltd	Maharashtra	100.00	97.98	99.67	0.00	100.00	100.00	96.00	98.67	0.00	0.00	70.83	94.73	99.13	0.00	72.00	316.00	0.00
48	Ishan Netsol Pvt Ltd	All India	100.00	91.14	100.00	0.00	100.00	100.00	68.02	81.71	0.00	0.00	72.30	91.00	98.74	0.00	100.00	225.00	0.00
49	Juweriyah Networks Private Limited	Maharashtra	100.00	98.00	100.00	0.00	100.00	100.00	83.67	87.00	0.00	0.00	83.00	99.00	100.00	0.00	1.00	47.00	80.00
		Mumbai	100.00	98.00	100.00	0.00	100.00	100.00	83.67	87.00	0.00	0.00	79.00	99.00	100.00	0.00	1.00	47.00	80.00
50	K NET Solutions Private Limited	Tamilnadu	100.00	94.34	99.35	0.00	100.00	100.00	86.64	88.40	0.00	0.00	0.00	100.00	99.63	0.00	11.13	257.93	0.00
51	Kerala Vision Broad Band Ltd.	All India	100.00	91.27	99.00	0.14	100.00	100.00	83.42	89.16	0.00	0.00	38.14	99.00	99.40	0.00	16.00	265.66	0.00
52	Kings Broadband Pvt. Ltd	Kerala	100.00	98.33	100.00	0.00	100.00	100.00	90.00	96.66	0.00	0.00	79.60	95.60	99.86	0.10	30.00	310.00	650.00
53	Mahanagar Telephone Nigam Ltd.	All India	96.17	61.48	74.38	0.00	100.00	74.11	93.06	96.62	0.00	0.00	34.00	89.70	99.33	0.50	38.50	250.41	0.00
54	Meghbela Cable & Broadband Services (P) Ltd	All India	100.00	95.00	100.00	1.13	100.00	100.00	95.00	100.00	0.00	0.00	74.00	95.00	100.00	0.00	60.00	150.00	0.00
55	Microscan Infocommtech Private Limited	Maharashtra	100.00	96.38	99.80	0.00	100.00	100.00	100.00	100.00	0.00	0.00	14.23	100.00	100.00	0.00	2.00	220.00	NA
		Mumbai	100.00	98.88	99.78	0.00	100.00	100.00	100.00	100.00	0.00	0.00	19.48	100.00	100.00	0.00	8.00	220.00	NA
56	Multicraft Digital Technologies Private Limited	All India	100.00	99.37	100.00	0.00	100.00	100.00	99.00	99.00	0.00	0.00	89.38	93.33	100.00	0.00	117.00	0.00	0.00
57	Navkar Supertech Pvt. Ltd.*	Maharashtra	100.00	96.16	99.33	0.00	100.00	100.00	95.43	96.63	0.00	0.00	76.00	93.35	100.00	0.00	67.00	65.00	0.00
58	Net 9 Fibernet Pvt. Ltd. (formerly Net 9 Online	Mumbai	100.00	97.52	100.00	0.00	100.00	100.00	100.00	100.00	0.00	0.00	87.94	90.00	99.68	0.34	94.67	303.33	0.00
59	Netplus Broadband Services Pvt. Ltd	All India	100.00	100.00	100.00	1.77	100.00	100.00	89.68	93.15	0.00	0.00	84.24	96.12	100.00	0.10	43.00	196.33	0.00
60	Nuron Networks Private Limited	Karnataka	100.00	91.24	99.00	0.00	100.00	100.00	94.00	100.00	0.00	0.00	0.00	90.00	100.00	0.10	15.00	21.00	22.00

Annexure 4.3 (Contd.)

61	ONEOTT ENTERTAINMENT LTD	All India	100.00	97.00	99.00	1.29	100.00	100.00	95.00	95.00	0.00	0.00	68.56	100.00	100.00	0.50	1.03	63.00	0.00
62	Pacenet Meghbela Broadband Pvt. Ltd.	Kolkata	100.00	95.00	100.00	1.20	100.00	100.00	95.00	100.00	0.00	0.00	74.00	95.00	100.00	0.00	60.00	150.00	0.00
63	Paradise Telecom Pvt. Ltd.	Maharashtra	100.00	100.00	100.00	0.16	100.00	100.00	65.23	80.73	0.00	0.00	63.00	90.00	100.00	0.00	4.00	255.00	0.00
64	Pioneer Elabs Limited	All India	100.00	91.22	99.27	1.41	100.00	100.00	70.40	87.33	0.00	0.00	0.00	88.77	100.00	0.90	98.33	322.67	722.00
65	Quadrant Televentures Ltd.	All India	100.00	93.50	99.35	0.27	100.00	100.00	95.64	97.33	0.00	0.00	78.90	100.00	100.00	0.00	19.00	252.00	0.00
66	Quest Consultancy Pvt. Ltd.	Gujarat	100.00	99.00	100.00	0.00	100.00	100.00	99.00	99.00	0.00	0.00	70.00	99.00	99.49	0.30	23.00	56.00	0.00
67	R.G. Technosolutions Pvt. Ltd.	Uttar Pradesh (Eas	100.00	92.22	99.75	0.00	100.00	100.00	79.33	98.25	0.00	0.00	13.32	98.33	99.77	0.33	89.00	330.00	252.00
68	Radinet Info Solutions Pvt Ltd	Madhya Pradesh	100.00	92.68	100.00	0.00	100.00	100.00	100.00	100.00	0.00	0.00	72.74	90.00	99.77	0.00	20.00	300.00	400.00
		Maharashtra	100.00	100.00	100.00	0.00	100.00	100.00	100.00	100.00	0.00	0.00	72.74	90.00	99.77	0.00	20.00	300.00	400.00
		Rajasthan	100.00	95.84	99.34	0.00	100.00	100.00	97.54	99.57	0.00	0.00	72.74	90.00	99.77	0.00	20.00	300.00	400.00
		Uttar Pradesh (We	100.00	100.00	100.00	0.00	100.00	100.00	96.25	99.58	0.00	0.00	72.74	90.00	99.77	0.00	20.00	300.00	400.00
69	RailTel Corporation of India Ltd.	All India	100.00	98.00	100.00	0.00	100.00	100.00	97.33	100.00	0.00	0.00	41.74	100.00	99.86	0.83	90.00	320.00	0.00
70	Rajesh Digital & Datacom Pvt. Ltd.	Mumbai	100.00	99.00	100.00	0.00	100.00	100.00	98.00	98.00	0.00	0.00	87.00	83.00	99.86	0.00	46.00	250.00	500.00
71	Readylink Internet Services Limited	Tamilnadu	100.00	99.00	100.00	0.04	100.00	100.00	92.00	93.00	0.00	0.00	66.00	82.00	100.00	0.00	23.00	85.00	0.00
72	Reliance Jio Infocomm Ltd	All India	100.00	95.82	99.64	0.00	100.00	100.00	82.38	87.58	0.00	0.00	57.05	100.00	99.98	0.02	20.80	71.12	NA
73	Ri Networks Pvt Ltd	All India	100.00	97.09	99.36	0.00	100.00	100.00	75.46	81.40	0.00	0.00	78.77	100.00	100.00	0.50	50.00	300.00	300.00
74	SDH Network Pvt. Ltd.*	Delhi	100.00	92.00	99.00	0.00	100.00	100.00	90.00	90.00	0.00	0.00	85.00	90.00	100.00	0.00	0.00	0.00	0.00
75	Shree Omkar Infocom Pvt. Ltd.	Maharashtra	100.00	98.00	100.00	0.00	100.00	100.00	95.00	98.00	0.00	0.00	72.00	98.00	100.00	0.50	2.00	125.00	555.00
76	Shyam Spectra Private Limited	All India	100.00	94.53	99.18	0.48	100.00	100.00	85.00	87.00	0.00	0.00	24.81	97.33	99.18	0.00	4.50	0.00	NA
77	Sikka Broadband(P) Ltd.	Uttar Pradesh (Eas	100.00	91.00	99.26	0.00	100.00	100.00	88.00	98.70	0.00	0.00	80.00	86.60	100.00	0.10	10.00	290.00	400.00
78	Siliguri Internet & Cable TV Pvt. Ltd.	West Bengal	100.00	97.43	100.00	0.14	100.00	100.00	81.00	96.33	0.00	0.00	76.71	93.33	100.00	0.88	85.00	300.00	0.00
79	SITI Broadband Services Pvt. Ltd.	All India	100.00	90.89	99.26	0.00	100.00	100.00	84.00	100.00	0.00	0.00	82.02	95.00	99.09	0.90	3.00	94.00	0.00
80	Snet Networks Pvt. Ltd.	Mumbai	100.00	95.00	99.00	0.00	100.00	100.00	70.00	81.00	0.00	0.00	85.00	85.00	99.31	0.50	0.00	0.00	0.00
81	Specific Net Pvt. Ltd	Maharashtra	100.00	94.37	100.00	0.00	100.00	100.00	84.66	91.00	0.00	0.00	80.68	92.08	98.99	0.73	84.89	68.05	NA
82	Spiderlink Networks Pvt. Ltd.	Rajasthan	100.00	93.09	99.27	0.00	100.00	100.00	71.74	82.66	0.00	0.00	70.00	98.00	100.00	0.00	30.00	225.00	0.00
83	Sri Sai Communication And Internet Pvt.Ltd.	All India	100.00	100.00	100.00	0.00	100.00	100.00	100.00	100.00	0.00	0.00	65.95	90.00	99.77	0.00	20.00	250.00	0.00
84	Sristi Sanchar Webnet Limited	Kolkata	100.00	96.50	100.00	0.00	100.00	100.00	90.00	100.00	0.00	0.00	80.00	90.46	99.18	0.00	60.00	208.00	199.00
85	Swiftmail Communications Ltd.	All India	100.00	95.00	100.00	0.00	100.00	100.00	70.00	90.00	0.00	0.00	0.00	90.00	98.93	0.10	0.00	80.00	0.00
86	Tachyon Communications Private Limited	Uttar Pradesh (Eas	100.00	98.00	100.00	0.22	100.00	100.00	88.00	94.00	0.00	0.00	58.12	99.00	100.00	0.00	35.00	70.00	NA
87	Tata Play Broadband Private Limited (formerly Tata Sky Broadband Pvt.Ltd.)	All India	100.00	82.86	91.03	0.00	100.00	100.00	89.44	90.94	0.00	0.00	27.00	100.00	99.99	0.00	1.00	0.00	0.00
88	Tata Teleservices Limited	Andhra Pradesh	100.00	91.84	99.71	0.01	100.00	100.00	100.00	100.00	0.00	0.00	64.14	93.00	99.93	0.00	55.00	110.00	0.00
		Bihar	100.00	100.00	100.00	0.00	100.00	100.00	100.00	100.00	0.00	0.00	64.14	87.67	99.95	0.00	67.00	124.07	0.00
		Delhi	100.00	96.90	100.00	0.00	100.00	100.00	100.00	100.00	0.00	0.00	64.14	94.67	99.97	0.00	44.67	99.26	0.00
		Gujarat	100.00	96.43	100.00	0.00	100.00	100.00	96.67	100.00	0.00	0.00	64.14	97.73	99.75	0.00	29.00	61.05	0.00
		Karnataka	100.00	91.99	99.79	0.05	100.00	100.00	99.02	99.02	0.00	0.00	64.14	94.47	99.62	0.00	95.67	191.33	0.00
		Kerala	100.00	100.00	100.00	0.00	100.00	100.00	100.00	100.00	0.00	0.00	64.14	96.43	99.85	0.00	38.67	86.00	0.00
		Kolkata	100.00	100.00	100.00	0.00	100.00	100.00	100.00	100.00	0.00	0.00	64.14	81.94	99.74	0.00	32.67	73.04	0.00
		Punjab	100.00	100.00	100.00	0.00	100.00	100.00	100.00	100.00	0.00	0.00	64.14	91.33	99.34	0.00	84.33	97.33	0.00
		Rajasthan	100.00	100.00	100.00	0.00	100.00	100.00	100.00	100.00	0.00	0.00	64.14	94.51	99.59	0.00	71.67	119.44	0.00
		Tamilnadu	100.00	97.52	99.72	0.04	100.00	100.00	95.83	95.83	0.00	0.00	64.14	89.67	99.63	0.00	44.00	97.78	0.00
89	Tata Teleservices(Maharashtra) Ltd.	Maharashtra	100.00	91.51	99.27	0.01	100.00	100.00	96.78	97.03	0.00	0.00	72.09	96.17	99.88	0.00	46.33	102.96	0.00
90	Tikona Infonet Ltd.	Mumbai	100.00	94.85	99.47	0.01	100.00	100.00	98.47	98.64	0.00	0.00	72.09	99.33	99.89	0.00	32.33	68.66	0.00
		All India	100.00	94.03	99.34	1.11	100.00	100.00	70.10	80.50	0.00	0.00	84.71	94.53	99.46	0.00	3.33	0.00	0.00
91	Vijaylakshmi Net Services Pvt.Ltd.	Andhra Pradesh	100.00	95.00	100.00	0.00	100.00	100.00	91.00	99.00	0.00	0.00	64.29	100.00	99.68	0.00	20.00	250.00	350.00
92	Vortex Infocom Pvt. Ltd.	Maharashtra	100.00	95.00	99.00	0.00	100.00	100.00	70.00	81.00	0.00	0.00	85.00	85.00	99.31	0.50	0.00	0.00	0.00
		Gujarat	100.00	95.00	99.00	0.00	100.00	100.00	70.00	81.00	0.00	0.00	85.00	100.00	99.31	0.50	0.00	0.00	0.00
93	Vortex Netsol Pvt. Ltd.	Maharashtra	100.00	95.00	99.00	0.00	100.00	100.00	70.00	81.00	0.00	0.00	85.00	100.00	99.31	0.50	0.00	0.00	0.00
		Mumbai	100.00	95.00	99.00	0.00	100.00	100.00	70.00	81.00	0.00	0.00	85.00	100.00	99.31	0.50	0.00	0.00	0.00
94	Wan and Lan Internet Pvt. Ltd.	Mumbai	100.00	100.00	100.00	0.00	100.00	100.00	90.00	90.00	0.00	0.00	88.00	90.00	100.00	0.00	20.00	40.00	80.00
95	Wave Fiber Pvt. Ltd. (Formerly Coastal Broadband)	Andhra Pradesh	100.00	94.00	100.00	0.00	100.00	100.00	84.00	94.33	0.00	0.00	83.33	100.00	99.44	0.00	20.00	250.00	350.00
96	Weebo Networks Pvt Ltd.	All India	100.00	92.83	100.00	0.00	100.00	100.00	84.33	98.30	0.00	0.00	88.00	85.00	99.46	0.44	100.00	300.00	600.00
97	Wish Net Pvt. Ltd.	Andhra Pradesh	100.00	100.00	100.00	0.00	100.00	100.00	100.00	100.00	0.00	0.00	0.00	100.00	100.00	0.30	0.00	0.00	0.00
		Assam	100.00	100.00	100.00	0.00	100.00	100.00	98.03	99.43	0.00	0.00	50.19	100.00	100.00	0.30	23.00	0.00	0.00
		Bihar	100.00	100.00	100.00	0.00	100.00	100.00	99.19	98.53	0.00	0.00	50.19	100.00	100.00	0.30	23.00	0.00	0.00
		Kolkata	100.00	98.60	100.00	0.00	100.00	100.00	98.10	97.02	0.00	0.00	50.19	100.00	100.00	0.30	12.00	0.00	0.00
		Madhya Pradesh	100.00	100.00	100.00	0.00	100.00	100.00	96.72	97.73	0.00	0.00	50.19	100.00	100.00	0.30	23.00	0.00	0.00
		Odisha	100.00	100.00	100.00	0.00	100.00	100.00	99.19	97.93	0.00	0.00	50.19	100.00	100.00	0.30	23.00	0.00	0.00
98	Yashash Cable Network Pvt Ltd	West Bengal	100.00	98.75	100.00	0.00	100.00	100.00	97.72	98.76	0.00	0.00	50.19	100.00	100.00	0.30	12.00	0.00	0.00
		Karnataka	100.00	95.45	99.20	0.00	100.00	100.00	87.91	93.50	0.00	0.00	57.48	84.00	99.14	0.01	48.00	257.00	0.00
99	You Broadband India Ltd.	All India	100.00	93.66	99.86	0.00	100.00	100.00	85.49	95.04	0.00	0.00	77.84	86.75	98.87	0.00	8.00	270.00	0.00

*New entrants

Annexure 5.1: List of pay channels, offered by broadcasters to subscribers as reported to TRAI (Tariff Order dated 03.03.2017, as amended on 22.11.2022)

S.No	Name of the broadcaster	Sl. No	Name of the channel	Declared as SD or HD
1	AETN 18 Media Pvt Limited	1	The History Channel	SD
		2	Histry TV 18 HD	HD
2	Bangla Entertainment Private Limited	3	SONY AATH	SD
		4	SONY Marathi	SD
3	BBC Global News India Private Limited	5	BBC World News	SD
		6	Cbeebies	SD
4	Bennett, Coleman & Company Limited	7	Zoom	SD
		8	Romedy Now	SD
		9	MN + (HD)	HD
		10	Mirror Now	SD
		11	ET NOW	SD
		12	Times Now	SD
		13	Times Now Navbharat HD	HD
		14	Movies Now HD	HD
		15	MNX HD	HD
		16	ET Now Swedesh	SD
		17	MNX	SD
5	Celebrities Management Pvt Limited	19	Travel XP HD	HD
		20	Travel XP Tamil	SD
		21	Foodxp	SD
6	CSL Info Media Private Limited	22	JAN TV PLUS	SD
7	Direct New Private Limited	23	News X	SD
8	Discovery Communications India	24	Animal Planet	SD
		25	Discovery Channel	SD
		26	DTAMIL	SD
		27	Discovery Kids Channel	SD

		28	Discovery Science	SD
		29	Discovery Turbo	SD
		30	Investigation Discovery	SD
		31	Discovery HD	HD
		32	Animal Planet HD	HD
		33	TLC HD	HD
		34	Investigation Discovery HD	HD
		35	TLC	SD
		36	EUROSPORT HD	HD
		37	EUROSPORT	SD
9	Disney Broadcasting (India) Limited	38	Disney Junior	SD
		39	Super Hangama (Marvel HQ)	SD
		40	Disney International HD	HD
		41	Hungama TV	SD
		42	The Disney Channel	SD
		43	Bindass	SD
		44	The Disney Channel HD	HD
10	Eenadu Televisoin Private Limited	45	ETV Telegu	SD
		46	ETV Andhra Pradesh	SD
		47	ETV - Telangana	SD
		48	ETV Cinema	SD
		49	ETV Life	SD
		50	ETV Plus	SD
		51	ETV Abhiruchi	SD
		52	ETV HD	HD
		53	ETV Plus HD	HD
		54	ETV Cinema HD	HD
		55	ETV Balbharat Telugu	SD
		56	ETV Balbharat Hindi	SD
		57	ETV Balbharat kannada	SD
		58	ETV Balbharat Malayalam	SD
		59	ETV Balbharat Tamil	SD
		60	ETV Balbharat English	SD

		61	ETV Balbharat HD	HD
		62	ETV Balbharat SD	SD
11	IN 10 Media Private Limited	63	EPIC TV	SD
		64	Filamchi	SD
		65	Gubbare	SD
		66	Showbox	SD
		67	Ishara TV	SD
12	Information TV Private Limited	68	India News	SD
13	Fame Media Private Limited	69	4tv News	SD
14	Greycells18 Media Limited	70	Topper TV	SD
15	IBN Lokmat News Private Ltd	71	News 18 Lokmat	SD
16	Living Entertainment Enterprises Private Ltd	72	LF HD	HD
17	Lifestyle and Media Broadcasting Limited	73	Good Times	SD
18	Lex Sportel Vision Private Limited	74	1SPORTS	SD
19	Mavis Satcom Limited	75	J Movies	SD
		76	Jaya Max	SD
		77	Jaya Plus	SD
		78	Jaya TV HD	HD
20	MSM World Wide Factual Media Private Limited	79	SONY BBC EARTH	SD
		80	SONY BBC EARTH HD	HD
21	Media World Wide Limited	81	Travel XP	SD
		82	WOMAN	SD
22	New Delhi Television Limited	83	NDTV 24*7	SD
		84	NDTV India	SD
		85	NDTV Profit	SD
23	NGC Network (India) Pvt Limited	86	Fox Life	SD
		87	National Geographic Channel (NGC)	SD
		88	Fox Life HD	HD
		89	Nat Geo Wild	SD

		90	National Geographic HD	HD
		91	Nat Geo Wild HD	HD
24	Tarang Broadcasting Compnay Limited	92	Prarthana	SD
		93	Tarang	SD
		94	Tarang Music	SD
		95	Alankar	SD
25	Odisha Television Limited	96	Tarang HD	HD
26	Raj Television Network Limited	97	Raj Digital Plus	SD
		98	Raj Musix	SD
		99	Raj News	SD
		100	Raj TV	SD
27	Silverstar Communications Limited	101	Mega 24	SD
		102	Mega Musiq	SD
		103	Mega TV	SD
28	Culver Max Entertainment Private Limited	104	Sony YAY!	SD
		105	SONY MAX	SD
		106	SONY SAB	SD
		107	SONY ENTERTAINMENT CHANNEL (SET)	SD
		108	SONY PIX	SD
		109	SONY MAX 2	SD
		110	SONY PAL	SD
		111	SONY ENTERTAINMENT CHANNEL HD	HD
		112	PIX HD	HD
		113	MAX HD	HD
		114	SONY Sports Ten 2 HD	HD
		115	SONY Sports Ten 3 HD	HD
		116	SONY Sports Ten 2	SD
		117	SONY Sports Ten 1	SD
		118	SONY Sports Ten 3	SD
		119	SONY Sports Ten 1 HD	HD
		120	SONY Wah	SD
		121	SAB HD	HD

		122	SONY Sports Ten 4	SD
		123	SONY Sports Ten 4 HD	HD
		124	SONY Sports Ten 5	SD
		125	SONY Sports Ten 5 HD	HD
29	Star India Private Limited	126	Star Sports 3	SD
		127	Star Sports 1 Tamil	SD
		128	Star Sports Select 2	SD
		129	Star Bharat	SD
		130	Star Gold 2 (Movies OK)	SD
		131	Star Sports 1 Hindi	SD
		132	Star Gold	SD
		133	Star Jalsha	SD
		134	Star Movies	SD
		135	Star Gold Select	SD
		136	Star Plus	SD
		137	Star Pravah	SD
		138	Star Sports 1	SD
		139	Star Sports 2	SD
		140	Jalsha Movies	SD
		141	Star Sports HD 2	HD
		142	Star Sports HD 1	HD
		143	Star Bharat HD	HD
		144	Star Gold HD	HD
		145	Star Movies HD	HD
		146	Star Plus HD	HD
		147	Star Sports 1 HD Hindi	HD
		148	Star Sports Select 1	SD
		149	Star Movies Select HD	HD
		150	Star Sports First	SD
		151	MAA Gold	SD
		152	MAA Movies	SD
		153	MAA Music	SD
		154	MAA TV	SD
		155	Star Pravah HD	HD

156	Star Jalsha HD	HD
157	Jalsha Movies HD	HD
158	Star Sports Select HD 1	HD
159	Star Sports Select HD 2	HD
160	MAA HD	HD
161	Star Gold Select HD	HD
162	MAA Movies HD	HD
163	Star Sport 1 Telugu	SD
164	Star Sport 1 Kannada	SD
165	Star Utsav	SD
166	Star Utsav Movies	SD
167	Star Gold Romance	SD
168	Star Gold Thrills	SD
169	Pravah Pictures	SD
170	Star Kiran	SD
171	Star Movies Select	SD
172	Star Gold 2 HD	HD
173	Star Sports 1Tamil HD	HD
174	Star Sports 1Telugu HD	HD
175	Star Kiran HD	HD
176	Pravah Pictures HD	HD
177	Vijay TV	SD
178	Vijay Super	SD
179	Vijay HD	HD
180	Vijay Takkar (Vijay Music)	SD
181	Asianet	SD
182	Asianet Plus	SD
183	Asianet Movies	SD
184	Suvarna Plus	SD
185	Star Suvarna HD	HD
186	Asianet HD	HD
187	Star Suvarna	SD
188	Vijay Super HD	HD
189	Asianet Movies HD	HD

30	SUN TV Network Limited	190	Adithya TV	SD
		191	Chintu TV	SD
		192	Chutti TV	SD
		193	Gemini Comedy	SD
		194	Gemini Life	SD
		195	Gemini Movies	SD
		196	Gemini Music	SD
		197	Gemini TV	SD
		198	KTV	SD
		199	Surya Movies	SD
		200	Kushi TV	SD
		201	SUN Life	SD
		202	Sun Music	SD
		203	Sun News	SD
		204	Surya Music	SD
		205	SUN TV	SD
		206	Surya Comedy	SD
		207	Surya TV	SD
		208	Udaya Comedy	SD
		209	Udaya Movies	SD
210	Udaya Music	SD		
211	Udaya TV	SD		
212	Kochu TV	SD		
213	Sun TV HD	HD		
214	KTV HD	HD		
215	Sun Music HD	HD		
216	Gemini TV HD	HD		
217	Gemini Music HD	HD		
218	Gemini Movies HD	HD		
219	Surya TV HD	HD		
220	Udaya TV HD	HD		
31	Suryansh Broadcasting Private Limited	221	Flowers	SD
32		222	Cartoon Network	SD

		223	CNN International	SD
	Warner Media India Private Limited	224	POGO	SD
		225	Cartoon Network HD+	HD
33	TV 18 Broadcast Limited	226	CNN News 18	SD
		227	CNBC Bajaar	SD
		228	CNBC TV 18 Prime HD	HD
		229	CNBC Awaaz	SD
		230	News 18 Tamil Nadu	SD
		231	News 18 Kerala	SD
		232	News 18 Assam / North East	SD
		233	News 18 India	SD
		234	CNBC TV 18	SD
		235	News 18 Bihar Jharkhand	SD
		236	News 18 Madhya Pradesh / Chattisgarh	SD
		237	News 18 Rajasthan	SD
		238	News 18 Uttar Pradesh/ Uttaranchal	SD
		239	News 18 Jammu/Kashmir/Ladakh/Himachal	SD
		240	News 18 Kannada	SD
		241	News 18 Bangla	SD
		242	News 18 Punjab / Haryana	SD
		243	News 18 Gujarati	SD
		244	News 18 Odia	SD
34	TV Today Network Limited	245	Aaj Tak	SD
		246	India Today	SD
		247	AAJ Tak HD	HD
		248	Good News Today	SD
35	Viacom 18 Media Private Limited	249	Colors	SD
		250	Comedy Central (HD)	HD
		251	MTV	SD
		252	NICK	SD
		253	NICK JR	SD

254	SONIC	SD
255	VH 1 (HD Distribution)	HD
256	Colors Infinity HD	HD
257	Colors Infinity	SD
258	Colors HD	HD
259	NICKS HD+	HD
260	Colors Cineplex	SD
261	MTV Beats	SD
262	Colors Kannada HD	HD
263	Colors Marathi HD	HD
264	Colors Bangla HD	HD
265	Colors Super	SD
266	Colors Cineplex Bollywood	SD
267	Sports18 1	SD
268	Sports 18 1 HD	HD
269	Sports 18 2	SD
270	Sports 18 3	SD
271	Colors Bangla	SD
272	Colors Gujarati	SD
273	Colors Kannada	SD
274	Colors Marathi	SD
275	Colors Odia	SD
276	MTV Beats HD	HD
277	Colors Tamil	SD
278	Colors Cineplex HD	HD
279	VH 1	SD
280	Colors Tamil HD	HD
281	MTV HD	HD
282	Colors Rishtey	SD
283	Colors Kannada Cinema	SD
284	Colors Gujarati Cinema	SD
285	Comedy Central	SD
286	Colors Bangla Cinema	SD
287	Colors Cineplex Superhit	SD

36	Zee Akaash News Private Limited	288	Zee 24 Ghanta	SD
37	Zee Entertainment Enterprises Limited	289	Zee Bollywood	SD
		290	Zee Action	SD
		291	Zee Bangla Cinema	SD
		292	Zee Café HD	HD
		293	Zee Café	SD
		294	Zee Cinema	SD
		295	Zee Talkies	SD
		296	Zee TV	SD
		297	Zing	SD
		298	& Picture	SD
		299	Zee Bangla	SD
		300	Zee Marathi	SD
		301	ZEE ZEST HD	HD
		302	Zee Zest	SD
		303	Zee TV HD	HD
		304	Zee Cinema HD	HD
		305	& TV	SD
		306	& TV HD	HD
		307	Zee Kannada	SD
		308	Zee Telugu	SD
309	& Pictures HD	HD		
310	Zee Cinemalu	SD		
311	Zee Yuva	SD		
312	Zee Marathi HD	HD		
313	& Prive HD	HD		
314	Zee Bangla HD	HD		
315	Zee Tamil HD	HD		
316	Zee Cinemalu HD	HD		
317	Zee Telugu HD	HD		
318	Zee Tamil	SD		
319	Zee Kannada HD	HD		
320	Zee Anmol Cinema	SD		

		321	& Flix HD	HD
		322	& Flix	SD
		323	Zee Keralam HD	HD
		324	Zee Keralam	SD
		325	Zee Anmol	SD
		326	Big Magic	SD
		327	Zee Ganga	SD
		328	Zee Classic	SD
		329	&Xplore HD	HD
		330	ZEE Sarthak	SD
		331	Zee Talkies HD	HD
		332	Zee Punjabi	SD
		333	Zee Thirai	SD
		334	Zee Picchar	SD
		335	Zee Thirai HD	HD
		336	Zee Picchar HD	HD
		337	Zee Biskope	SD
38	Zee Media Corporation Limited	338	Zee 24 Taas	SD
		339	Zee Delhi NCR Haryan (Zee Odisha)	SD
		340	Zee Business	SD
		341	Zee Punjab Haryana Himachal	SD
		342	Zee Madhya Pradesh Chattisgarh	SD
		343	Salaam TV	SD
		344	Zee 24 Kalak	SD
		345	WION	SD
		346	Zee Uttar Pradesh Uttrakhand	SD
		347	Zee Bharat	SD
		348	Zee Bihar Jharkhand	SD
		349	Zee News	SD
		350	Zee Rajasthan News	SD
		351	Zee News HD	HD
		352	Zee Kannada News	SD
		353	Zee Telugu News	SD

39	Zoom Entertainment Network Limited	354	Movies Now	SD
40	Sidharth Broadcasting Private Limited	355	Sidharth TV	SD
41	Sarhak Music Private Limited	356	Sidharth Bhakti	SD
		357	Jay Jagannath	SD
		358	Sidharth Gold	SD
42	Kalaignar TV Pvt Limited	359	Kalaignar TV	SD
		360	Kalaignar Isai Aruvi	SD
		361	Kalaignar Siripolli	SD
		362	Kalaignar Murasu	SD
		363	Kalaignar Seithigal	SD

List of Major MSOs/HITS Operators

- 1. M/s. Siti Networks Limited.,**
1st Floor, FC-09, Gate No.03,
Sector-16-A Film City,
Noida-201301,
Tel: 0120-4526700
Website : www.sitinetworkslimited
Toll Free No. 1800 1234 001

- 2. M/s Den Networks Limited.**
236, Ground Floor, Okhla Industrial Estate,
Phase-III, New Delhi-110020
Website: www.den networks.com
Toll Free No. 1800 419 2020

- 3. M/s Hathway Digital Private Limited.**
805/606, 8th Floor, Windsor
Off CST Road, Kalina, Santacruz (East),
Mumbai-400098 (Maharashtra)
PH: 022-26001306,
Fax No: 022-26001307
Website : www.hathway.com
Toll Free No. 1800 4197 900

- 4. M/s GTPL Hathway.**
202, 2nd Floor,
Sahajanad Shopping Center
Opp. Swaminarayan Mandir
Shahibaug, Ahemdabad-38004
Ph: 079-30280340 / 41, 079-25626476 / 77
Website : www.gtpl.net
Toll Free No. 1800-419-0419

- 5. M/s NXT Digital Limited.**
IN Centre, 49/50 MIDC
12th Road, Andheri
MUMBAI-400093 (Maharashtra)
Ph: 022-28208585
Website : www.nxtdigital.co.in
Toll Free No. 18602120400 18002100400

- 6. M/s NXT Digital Limited (HITS)**
IN Centre, 49/50 MIDC
12th Road, Andheri
MUMBAI-400093 (Maharashtra)
Ph: 022-28208585
Website : www.nxtdigital.co.in
Toll Free No. 18602120400 18002100400
- 7. M/s Fastway Transmission Pvt. Ltd..**
SCO-16-17, Top Floor
Sector-34-A, Chandigarh
Ph: 0161-4044444
Website : www.fastway.in
Toll Free No. 18001026602
- 8. M/s Tamil Nadu ARASU Cable TV Corporation Ltd.**
11/22, Mangadusamy Street, Nungambakkam,
Chennai-600034
Ph: 044-2843 2911
Fax : 044-2843 2913
Website : www.tactv.in
Toll Free No. 1800 425 2911
- 9. M/s Kerala Communicators Cable Ltd.**
CC -22/491, Girnar, Kadavanthara,
Cochin-682020 (Kerala)
Ph: 0484-2316441
Website : www.kccl.tv
Toll Free No. 18004195755
- 10. M/s Thamizhaga Cable TV Communication Pvt. Ltd.**
Old No. 150, New No. 48, Sami Naicken Street,
Chinthadripet, Chennai-600002 (T.N.)
Ph: 044-49272222
Website : www.tccl.co.in
Toll Free No. 1800-102-9845
- 11. M/s Kal Cable Private Ltd.**
No. 229, Kutchery Road, Mylapore,
Chennai-600004 (T.N.)
Ph: 044-49616161
Fax : 044-49616171
Website : www.scv.in
Toll Free No. 1800-102-0728

12. M/s V.K. Digital Network Pvt. Ltd.

3-A-29, Willow Crest,

6th Main Road, R.A. Puram,

Chennai-600029 (T.N.)

Ph: 044-4242 8282

Website : www.vkdigital.co.in

Toll Free No. 18004199908

List of Pay DTH Operators

- 1. M/s. Tata Play Limited**
Tata Communications Complex,
Mandi Road, PO Chattarpur,
New Delhi – 110 074
Tel: 011-6616 3000
Fax-022-6616 3030
Website : www.tatasky.com
Toll Free No. 18002086633
- 2. M/s Dish TV India Ltd.**
FC-19, Sector-16A, Film City,
Noida-201301
Tel: 91-120-2467005 / 2467000
Fax: 91-120-4357082
Toll Free No. 18002583474 (Dish), 1800212212 (d2h)
Website : www.dishtv.in
- 3. SUN Direct TV(P) Ltd.**
Murasoli Maran Towers, 73, MRC Nagar,
Main Road, MRC Nagar, Chennai – 28
PH: 044-44676767, Fax No 044-40679191
Website : www.sundirect.in
Toll Free No. 18001037575
- 4. Bharti Telemedia Ltd.**
Airtel Centre, Plot No 16,
Udyog Vihar Phase IV,
Gurgaon – 122 015
Ph: 0124-4222222
Fax : 0124-4248063
Website : www.airtel.in
Toll Free No. 18001036065

List of Pay IPTV Operators

List of IPTV Operators at the end of December 2023	
S.No.	Name of IPTV Operators
1	M/s Hyderabad Cable Digital Service Pvt. Ltd.
2	M/s Bhoomika Digital Cable Services Pvt. Ltd.
3	M/s Peak Air Pvt. Ltd.
4	M/s Katalysts Productions Pvt. Ltd.
5	M/s Andhra Pradesh State Fibernet Limited
6	M/s Triple Play Teleservices (P) Ltd.
7	M/s WI Bro Solutions Pvt. Ltd
8	M/s Extreme Teleconnect Pvt. Ltd.
9	M/s Delinet Broadband Pvt. Ltd
10	M/s Den Networks Ltd.
11	M/s Hathway Digital Limited
12	M/s City Online Media Pvt. Ltd.
13	M/s Act Digital Home Entertainment Pvt. Ltd.
14	M/s Kabel First India Pvt. Ltd.
15	M/s ACN Cable Pvt. Ltd.
16	M/s UCN Network Pvt. Ltd.
17	M/s Atria Convergence Technologies Ltd.
18	M/s Skypro Communications
19	M/s E2 Info Solutions
20	M/s Assistive Netspeed Technologies Pvt. Ltd.
21	M/s Bangalore Broadband Network Private Limited
22	M/s Creative Cable Network
23	M/s Wired Entertainment
24	M/s V.K. Digital Network Private Ltd.
25	M/s AAA Cloud Telephony Private Limited
26	M/s Dombivali Optical Network Cable Pvt. Ltd
27	M/s ST Broadband Cable Service
28	M/s Kal Cables Private Limited

Annexure 5.5: List of 113 cities with operational private FM Radio Channels in India (as on 31st December 2023)

S.No.	City	Category	Channels
1	Agartala	D	2
2	Agra	B	4
3	Ahmedabad	A	6
4	Ahmednagar	C	4
5	Aizwal	D	3
6	Ajmer	C	4
7	Akola	C	4
8	Alappuzha	C	2
9	Aligarh	C	4
10	Allahabad	B	4
11	Amravati	C	1
12	Amritsar	B	4
13	Asansol	B	3
14	Aurangabad	C	4
15	Bareilly	C	4
16	Bengaluru	A	8
17	Bhadarwah	Others	1
18	Bharuch	D	2
19	Bhavangar	C	2
20	Bhopal	B	4
21	Bhubaneshwar	C	4
22	Bikaner	C	4
23	Bilaspur	C	3
24	Chandigarh	C	4
25	Chennai	A+	7
26	Coimbatore	B	4
27	Dehradun	C	1
28	Delhi	A+	9
29	Dhule	C	3
30	Dhubri	Others	1
31	Durg-Bhillaina	D	1

32	Erode	C	2
33	Gangtok	D	2
34	Godhara	D	1
35	Gorakhpur	C	4
36	Gulbarga	C	1
37	Guwahati	C	4
38	Gwalior	C	4
39	Haflong	Others	1
40	Hissar	D	4
41	Hubli - Dharwad	C	2
42	Hyderabad	A	8
43	Indore	B	4
44	Itanagar	D	2
45	Jabalpur	B	4
46	Jaipur	A	6
47	Jalandhar	C	4
48	Jalgaon	C	4
49	Jammu	C	4
50	Jamnagar	C	2
51	Jamshedpur	B	4
52	Jhansi	C	4
53	Jodhpur	C	4
54	Junagarh	D	2
55	Kannur	C	3
56	Kanpur	A	6
57	Karnal	D	3
58	Kargil	Others	2
59	Kathua	Others	2
60	Kochi	B	4
61	Kolhapur	C	4
62	Kolkata	A+	7
63	Kota	C	4
64	Kozhikode	C	4
65	Lucknow	A	6

66	Leh	Others	3
67	Madurai	B	4
68	Mangalore	C	3
69	Mehsana	D	2
70	Mumbai	A+	9
71	Muzaffarpur	C	4
72	Mysore	C	3
73	Nagpur	A	6
74	Nanded	C	3
75	Nasik	C	4
76	Nellore	C	1
77	Palampur	D	1
78	Panaji	D	2
79	Patiala	C	4
80	Patna	C	4
81	Porbandar	D	1
82	Punch	Others	2
83	Puducherry	C	4
84	Pune	A	6
85	Raigarh	D	1
86	Raipur	C	3
87	Rajahmundry	C	3
88	Rajkot	B	4
89	Ranchi	C	4
90	Rourkela	C	2
91	Salem	C	2
92	Sangli	C	4
93	Shillong	D	3
94	Shimla	D	3
95	Sholapur	C	4
96	Siliguri	C	3
97	Srinagar	C	4
98	Surat	A	6
99	Thiruvananthapuram	C	4

100	Thoothukudi	C	2
101	Thrissur	C	3
102	Tiruchirappalli	C	3
103	Tirunelveli	C	3
104	Tirupati	C	3
105	Udaipur	C	4
106	Ujjain	C	1
107	Vadodra	B	4
108	Varanasi	B	4
109	Vellore	C	2
110	Veraval	D	1
111	Vijayawada	B	3
112	Vishakapatnam	B	3
113	Warrangal	B	3
	Total		388

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